Speed Dome

EPTZ Series

USER MANUAL

Date: Dec. 2009

Table of Contents

1. EPTZ SERIES OVERVIEW 7

1.1. Introduction 7

1.2. Specifications (3600 series) 8

1.3. Specifications (3100 series) 10

1.4. Feature 12

1.4.1. Profile of EPTZ 12

1.4.2. EPTZ Base Board 13

1.5. EPTZ Quick Operation Guide (Work with EKB500) 15

2. EPTZ INSTALLATION 16

2.1. Packing List 16

2.2. Connections 18

2.3. Initial Setup 18

2.3.1. Address Setting 19

2.3.2. Communication Protocol Setting 23

2.3.3. Transmission Speed Setting (Baud Rate Setting) 23

2.4. Bracket and Speed Dome Installation 24

2.4.1. Installation Requirements 24

2.4.2. EPTZ Dome Camera Wall Mount Simple Installation 25

2.4.3. EPTZ Dome Camera Wall Mount Installation 28

2.4.4. EPTZ Dome Camera Ceiling Mount Installation 35

2.5. Bracket & Adapter 39

2.5.1. Indoor Ceiling Pendent Mount Bracket 39

2.5.2. Pole Mount Adapter 39

2.5.3. Corner Mount Adapter 40

2.5.4. Indoor Concrete Ceiling Mount Adapter 40

3. EPTZ3600 SERIES CAMERA SETUP MENU....41

3.1. Structure of the Setup Menu 41

3.2. VIDEO SETTINGS 42

3.2.1. EXPOSURE 42

3.2.2. FOCUS MODE 44

3.2.3. DIGITAL ZOOM 44

3.2.4. WHITE BALANCE 44

3.2.5. BACKLIGHT 45

3.2.6. DAY/NIGHT 45

3.2.7. COLOR: 45

3.2.8. NEGATIVE 46

3.2.9. WIDE DYNAMIC RANGE 46

3.2.10 EXIT 46

3.3. POSITIONS 47

3.4. OSD/AREAS 50

3.4.1. CAM. TITLE 50

3.4.2. AREAS 50

3.4.3. DIRECTIONS 52

3.4.4. DISPLAY 53

3.4.5. EXIT 55

3.5. AUTO MODES 55

3.5.1. AUTO TRACKING (For Auto Tracking Model Only) 55

3.5.2. AUTOPAN 62

3.5.3. PRESET TOURS 64

3.5.4. PATTERN 65

3.5.5. AUTO RESUME 67
3.5.6. RESUME TO 67
3.5.7. POWER UP FUNC 68
3.5.8. AUTO FLIP 68
3.5.9. EXIT 69
3.6. ALARM 69
3.6.1. ALARM INPUTS 69
3.6.2. ALARM OUTPUTS 71
3.6.3. MOTION DETECT 72
3.6.4. EXIT 74
3.7. PRIVATE ZONES 74
3.8. SYSTEM 77
3.9. INFO 78
3.10. EXIT 79
4. EPTZ3100 SERIES CAMERA SETUP MENU 80
4.1. Structure of the Setup Menu 80
4.2. VIDEO SETTINGS 81
4.2.1. EXPOSURE 81
4.2.2. FOCUS MODE 83
4.2.3. DIGITAL ZOOM 84
4.2.4. WHITE BALANCE 84
4.2.5. DAY/NIGHT 84
4.2.6. DIG. NOISE REDUCE 85
4.2.7. WIDE DYNAMIC RANGE 85
4.2.8. EXIT 86
4.3. POSITIONS 87

4.4. OSD/AREAS 90

4.4.1. CAM. TITLE 90

4.4.2. AREAS 90

4.4.3. DIRECTIONS 92

4.4.4. DISPLAY 93

4.4.5. EXIT 95

4.5. AUTO MODES 95

4.5.1. AUTO TRACKING (For Auto Tracking Model Only) 95

4.5.2. AUTOPAN 102

4.5.3. PRESET TOURS 104

4.5.4. PATTERN 105

4.5.5. AUTO RESUME 107

4.5.6. RESUME TO 107

4.5.7. POWER UP FUNC 107

4.5.8. AUTO FLIP 107

4.5.9. EXIT 107

4.6. ALARM 107

4.6.1. ALARM INPUTS 108

4.6.2. ALARM OUTPUTS 111

4.6.3. MOTION DETECT 112

4.6.4. EXIT 112

4.7. PRIVATE ZONES 113

4.8. SYSTEM 115

4.9. INFO 116

4.10. EXIT 117

5. EPTZ FUNCTION SETUP AND OPERATION 118

5.1. Manual Control Mode 118

5.2. Auto Tracking Mode (For Auto Tracking Models Only) 118

5.3. Auto Pan Mode 118

5.4. Position Setting 119

5.5. Tour Mode 121

5.6. Alarm Link to a Position/Tour 122

5.7. Other Operations 122

1. EPTZ SERIES OVERVIEW

1.1. Introduction

The EPTZ series uses high sensitivity and high resolution to display a high quality image in multiple environments. The IR Cut Filter and Wide Dynamic functions allows for a clear picture in all lighting conditions. The solid mount construction prevents vibration even when moving at top speed of 360 degrees/sec. The full list of features includes the following:

- Built in 36x/30x Optical Zoom Lens
- Super High Resolution 530TV Lines for 36x series; 520TV Lines for 31x series.
- True Day/Night function (IR Cut Filter Removable)
- Wide Dynamic Range
- Digital Slow Shutter
- Privacy Zone Masking
- Motion Detection
- Auto detection of protocols
- Tilt rotation range: 180°
- 192 preset positions are available
- 16 cruise tours can be set, and each tour contains up to 16 positions

閩 4 Alarm Inputs / 2 Alarm Outputs

- Running to position speed, 0.01º/s to 360º/s

閩 RS485 Communication

閩 IP66

- Available in different models:

Models	36x Optical Zoom Lens	30x Optical Zoom Lens
Outdoor (without auto tracking)	EPTZ3600	EPTZ3100
Indoor (without auto tracking)	EPTZ3600I	EPTZ3100I
Outdoor (with auto tracking)	EPTZ3650	EPTZ3150
Indoor (with auto tracking)	EPTZ3650I	EPTZ3150I

1.2. Specifications (3600 series)

Product Model	EPTZ3600 (Outdoor)	EPTZ3600I (Indoor)
Pickup Device	SONY 1/4” EX-view HAD CCD	
Video Format	NTSC or PAL	
Scanning System	NTSC: 525 TV lines, 60 fields/sec PAL: 625 TV lines, 50 fields/sec.	
Picture Elements	Approx. 768 x 494 (NTSC) Approx. 752 x 582 (PAL)	
Horizontal Resolution	530 TV Lines	
Sensitivity	1.4 Lux/ F1.6 (Normal) 0.1 Lux/ F1.6 (ICR OFF) 0.01 Lux/ F1.6 (ICR ON)	
S/N Ratio	50 dB (Weight ON)	
Electronic Shutter	1 ~ 1/10,000(s) (NTSC) 1 ~1/10,000(s) (PAL)	
Digital Slow Shutter	60x(50x for PAL)	
Shutter Selection	AUTO; A.FLK; Manual (1~1/10000) selectable	
Lens Type	36x optical zoom, f=3.4 mm (wide) to 122.4mm (tele), F1.6 to F4.5	
Zoom Ratio	432x max. (36x Optical and 12x Digital zoom)	
True Day & Night	Yes (Auto/DAY/NIGHT)	
Backlight Comp.	Yes (OFF/ON)	
Wide Dynamic Range	Yes (OFF/ON)	
White Balance	Auto / Indoor / Outdoor	
Motion Detection	Yes (4 zone)	
Privacy Zone Masking	Yes (8 zone)	
Gamma Correction	0.45	
Video Output	1Vp-p / 75 ohm	
Sync. Mode	Internal	
Power Source	24VAC	
Power Consumption	21W Max	
Operating Temperature	- 40□~+50□≤95%	-10□~+50□≤85%
Focus Control	One push/Auto/Manual	

Horizontal Rotation Speed	0.01°/s－360°/s (1-255 grade shift gears)	
Horizontal Rotation Range	360° unlimited rotation	
Tilt Rotation Range	180° pendulum motion	
Auto Zoom Speed Control	Control speed auto-adjusted according to zoom length changing	
Auto Pan, 2 points scanning	Can set freely	
Auto Pan Speed	1－255 grade available	
Dwell Time (2 points)	1－99 second available	
Preset Positions	192 positions	
Running to position speed	1－255 grade available,0.01º/s - 360º/s	
Dwell time at preset position	1－99 available	
Tour	16 groups	
Tour point per group	16 preset positions	
Pattern	4 patterns with 90 sec long each	
Fan	Fan auto starts	
Position Accuracy	±0.1°	
Alarm	4 in 2 out with tour/position auto triggering	
Built-in Menu for Functions	Yes	
Auto Tracking Function	Yes (only for EPTZ3650)	
Communication	RS-485	
Communication Speed	1200/2400/4800/9600bps	
Built-in Protocols	EVF-1; EVF-2; Pelco-P ;Pelco-D; A-Type; Plus-D; AUTO; Panasonic (Plus-D supports all other brands, it is equivalent to Pelco-D)	
Address Editable	Yes (through DIP switch)	
Speed Dome Address	0-255	
Manual Pan/Tilt Speed	Pan: 0.01º ~ 360º/s ; Tilt: 0.01º ~ 180º/s	
Safety	CE, FCC	
Dimensions	180mm(W) x 280mm(H) ; 7.1”(W) x 11”(H)	159mm(W) x 230mm(H) 6.3”(W) x 9.1”(H)
Weight	Approx. 3.0kg	

1.3. Specifications (3100 series)

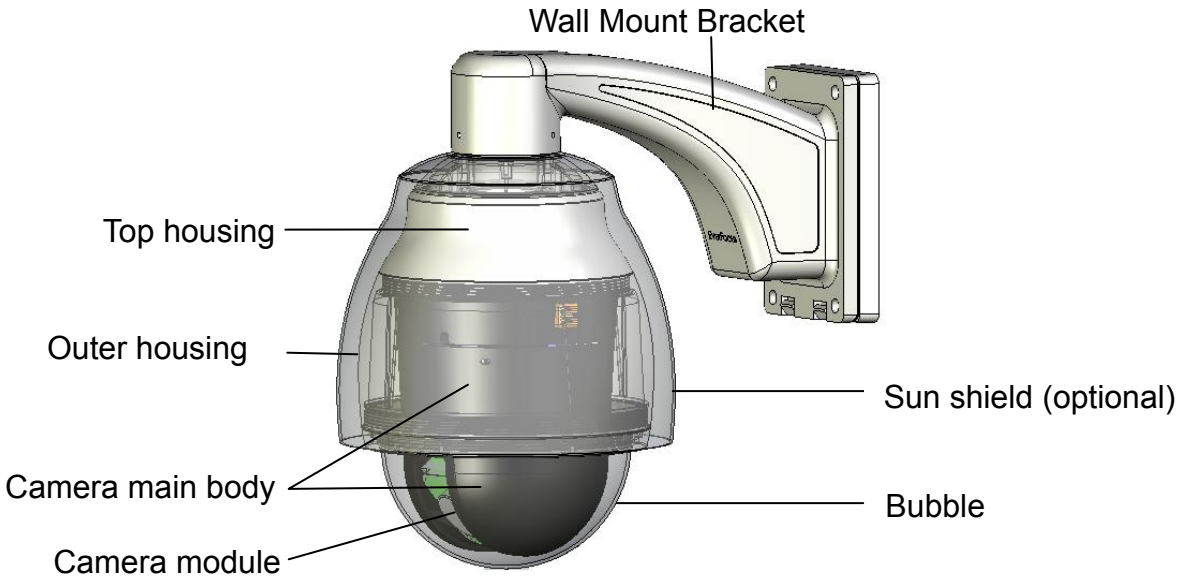
Product Model	EPTZ3100 (Outdoor)	EPTZ3100I (Indoor)
Pickup Device	1/4” CCD	
Video Format	NTSC or PAL	
Scanning System	NTSC: 525 TV lines, 60 fields/sec PAL: 625 TV lines, 50 fields/sec.	
Picture Elements	768 x 494 (NTSC) 752 x 582 (PAL)	
Horizontal Resolution	520 TV Lines	
Sensitivity	0.4 Lux/ F1.6 (ICR OFF) 0.08 Lux/ F1.6 (ICR ON)	
S/N Ratio	50 dB (Weight ON)	
Electronic Shutter	128x~1/60~1/120,000(s) (NTSC) 128x~1/50~1/120,000(s) (PAL)	
Digital Slow Shutter	128x	
Shutter Selection	AUTO; A.FLK; Manual 128x~1/60 (1/50)~1/120,000 selectable	
Lens Type	30x optical zoom, f=3.3 mm (wide) to 99.0mm (tele), F1.6 to F3.2	
Zoom Ratio	240x max. (30x Optical and 8x Digital zoom)	
True Day & Night	Yes (Auto/DAY/NIGHT)	
Backlight Comp.	Yes (OFF/LOW/MIDDLE/HIGH)	
Wide Dynamic Range	Yes (OFF/ON/AUTO)	
White Balance	Indoor / Outdoor/MAN5100K/MAN3200K/MAN2000K/ONE PUSH	
Motion Detection	Yes (ON/OFF)	
Privacy Zone Masking	Yes (8 zones)	
Video Output	1Vp-p / 75 ohm	
Sync. Mode	Internal	
Power Source	24VAC	
Power Consumption	21W Max	
Operating Temperature	- 40□~+50□≤95%	-10□~+50□≤85%
Focus Control	One push/Auto/Manual	

Horizontal Rotation Speed	0.01°/s－360°/s (1-255 grade shift gears)	
Horizontal Rotation Range	360° unlimited rotation	
Tilt Rotation Range	180° pendulum motion	
Auto Zoom Speed Control	Control speed auto-adjusted according to zoom length changing	
Auto Pan, 2 points scanning	Can set freely	
Auto Pan Speed	1－255 grade available	
Dwell Time (2 points)	1－99 second available	
Preset Positions	192 positions	
Running to position speed	1－255 grade available,0.01º/s - 360º/s	
Dwell time at preset position	1－99 available	
Tour	16 groups	
Tour point per group	16 preset positions	
Pattern	4 patterns with 90 sec long each	
Fan	Fan auto starts	
Position Accuracy	±0.1°	
Alarm	4 in 2 out with tour/position auto triggering	
Built-in Menu for Functions	Yes	
Auto Tracking Function	Yes (only for EPTZ3150)	
Communication	RS-485	
Communication Speed	1200/2400/4800/9600bps	
Built-in Protocols	EVF-1; EVF-2; Pelco-P ;Pelco-D; A-Type; Plus-D; AUTO; Panasonic (Plus-D supports all other brands, it is equivalent to Pelco-D)	
Address Editable	Yes (through DIP switch)	
Speed Dome Address	0-255	
Manual Pan/Tilt Speed	Pan: 0.01º ~ 360º/s ; Tilt: 0.01º ~ 180º/s	
Safety	CE, FCC	
Dimensions	180mm(W) x 280mm(H) ; 7.1”(W) x 11”(H)	159mm(W) x 230mm(H) 6.3”(W) x 9.1”(H)
Weight	Approx. 3.0kg	

1.4. Feature

1.4.1. Profile of EPTZ

Outdoor model

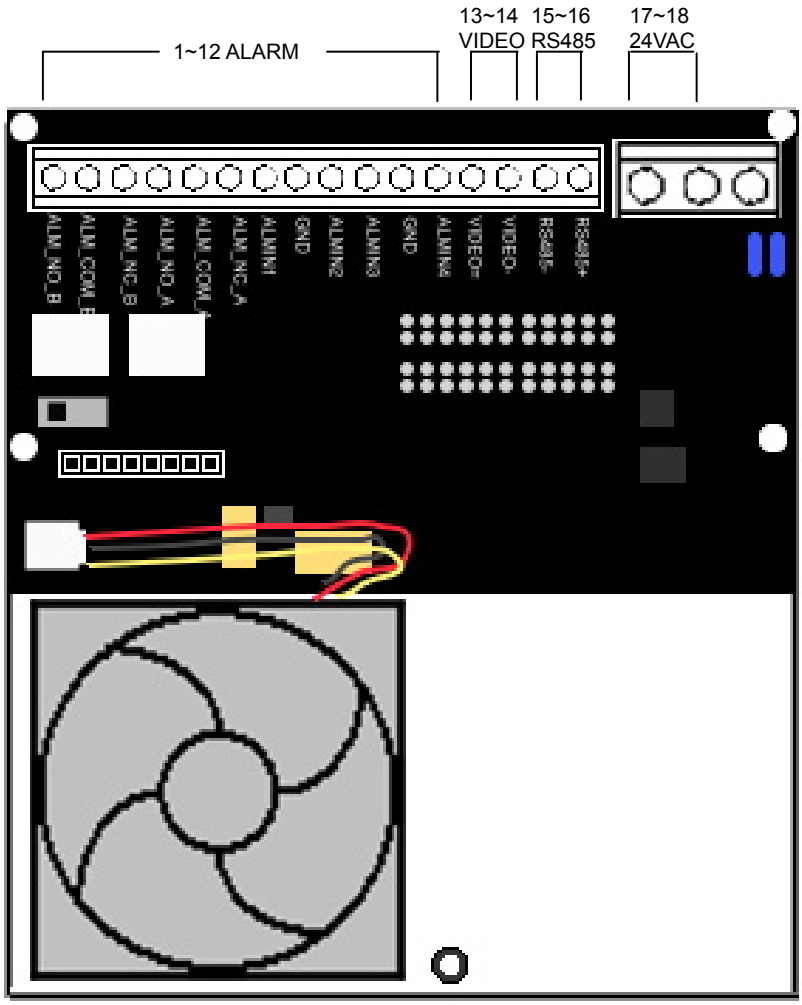


Indoor model

1.4.2. EPTZ Base Board

The base board that is inside the top housing connects to power cable, video cable, control cable, alarm cable and fan. The housing must be removed in order to properly connect the cables. The connectors of cable names are marked on the board in white text. The details of the alarm connector are shown on the APPENDIX.

There are 4 alarm inputs and 2 alarm outputs available, represented by Pin 1~12. Pin 13 and 14 are video pins for connecting to video cable. Pin15~16 are RS485 pin for connecting to keyboard. Pin 17 and 18 are power pin for connecting to 24VAC power.



EPTZ Base board

Pin #	Function
1	ALM_NO_B (Alarm Output Normal Open B)
2	ALM_COM_B (Alarm Output Common B)
3	ALM_NC_B (Alarm Output Normal Close B)
4	ALM_NO_A (Alarm Output Normal Open A)
5	ALM_COM_A (Alarm Output Common A)
6	ALM_NC_A (Alarm Output Normal Close A)
7	ALMIN1 (Alarm Input 1)
8	GND (Ground)
9	ALMIN2 (Alarm Input 2)
10	ALMIN3 (Alarm Input 3)
11	GND (Ground)
12	ALMIN4 (Alarm Input 4)
13	VIDEO+
14	VIDEO-
15	RS485-
16	RS485+
17	AC24A+
18	AC24B-

1.5. EPTZ Quick Operation Guide (Work with EKB500)

EPTZ and EKB500 (Keyboard) can work together by using factory default setting.

You just need to connect cables by the following steps:

1. Connect the RS-485 cable to EPTZ and a keyboard (EKB500).
2. Connect a video cable from EPTZ to a monitor.
3. Connect the power to the EPTZ and a keyboard (EKB500).

After the EPTZ finishes the self-test mode, you can start to operate the EPTZ via the keyboard.

To operate the speed dome:

1. Move the Joystick up/down or right/left to shift the camera view in that direction.
2. Twist the top of the Joystick to zoom in/out.
3. Press the Zoom In/Out, Focus F./N., or IRIS +/- keys to manually operate these functions.

2. EPTZ INSTALLATION

2.1. Packing List

There are 3 boxes that are camera main body with a camera module, top housing with a base board & pin connector and outer housing with bubble, plus one tool packet in the package. The detail accessories are listed below:

Standard

- Camera Main Body x 1
- Top Housing x1
- Outer Housing with Bubble x1
- Tool packet
  - Hexagon Wrench x1
  - Glove x 1 pair
  - RS485 Terminal Block
  - 3 desiccant packs

Optional Accessories

* EPTZ-PBOX (External Power Connection Box)

* Corner Mount Adapter

* Pole Mount Adapter

* Indoor Ceiling Pendent Mount Bracket

* Outdoor Sunshield

* Indoor Recessed Mount Bracket

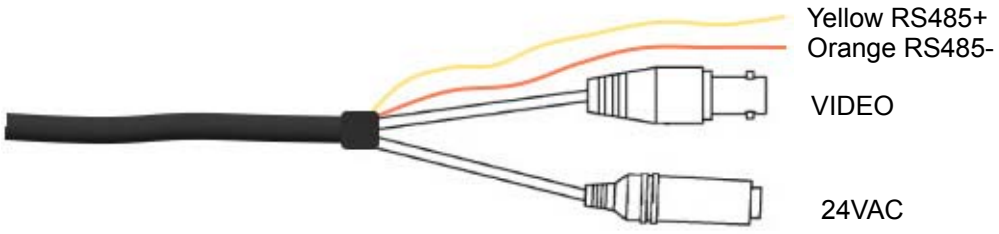
* Wall Mount Bracket

* Indoor Concrete Ceiling Mount Adapter

* EKB500 (Keyboard)

* EKB200 (USB Controller Keyboard)

2.2. Connections



Power Cable

An adapter with 24VAC/3.5A output provides the power to the EPTZ. An extension power line may be needed.

Note: Different regions may use different ranges for AC voltage. Be sure to check the voltage range in your area before installing.

Video Cable

A BNC cable is used for connecting an EPTZ to a DVR or a monitor. An amplifier may be needed depending on the distance.

RS485 Cable

The yellow wire carries RS485+, and the orange wire carries RS485-. Connect these wires to the EKB500 or other control device in order to control the PTZ camera.

2.3. Initial Setup

Initial setup includes dome address, communication protocol, transmission speed, and terminal resistance settings. All of the settings should be confirmed before the dome is powered up. The camera's control settings must match the ones in the control device

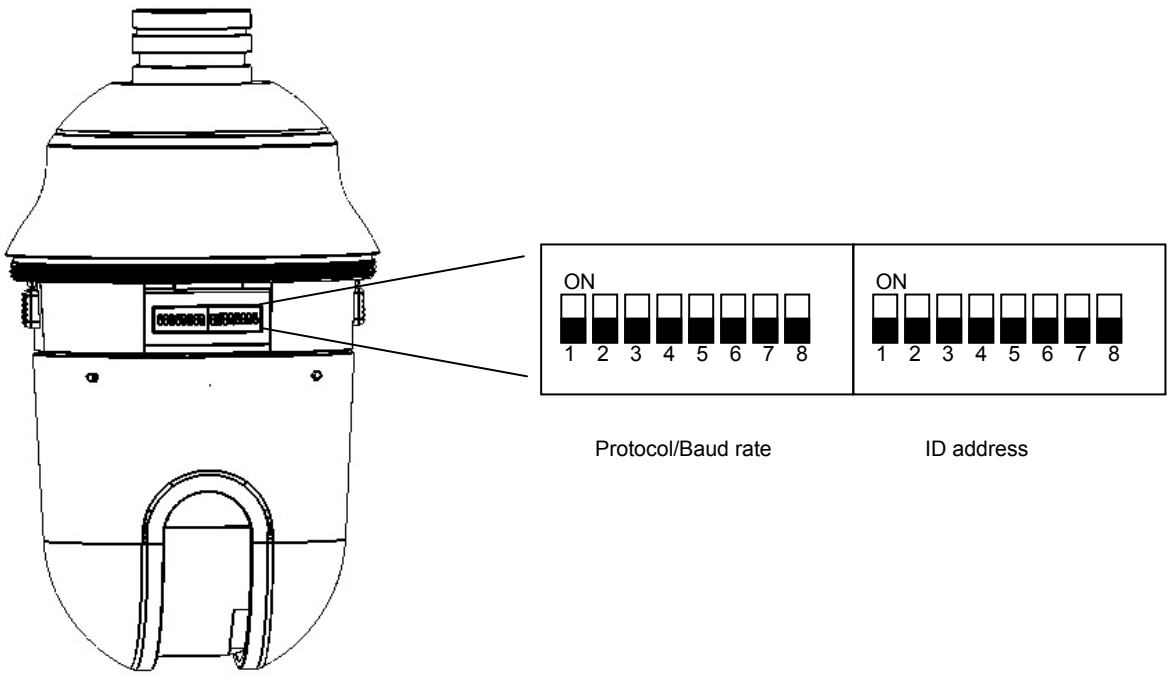
(such as a keyboard or DVR).

Notice: Please make sure the power is off while making changes. EPTZ must be restarted before new values will take effect.

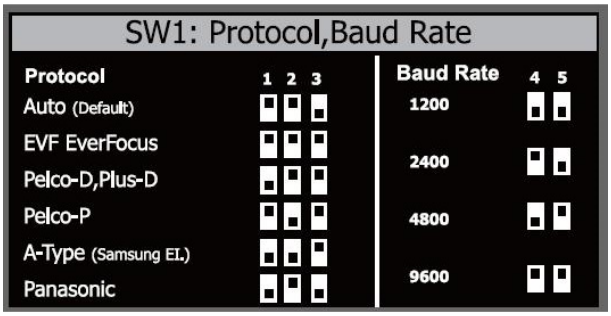
2.3.1. Address Setting

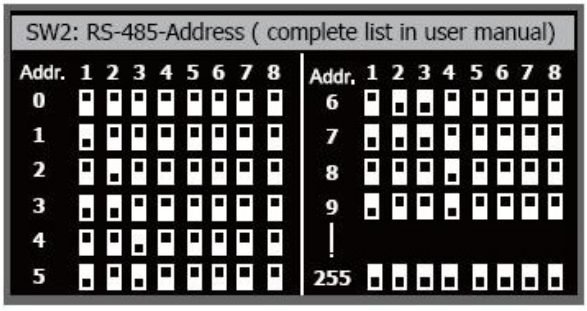
The address code of the EPTZ should be set to correspond properly with a control device to control multiple dome cameras. The address is indicated by the dip switches on the main camera body. The 8 switches correspond with the binary code of the address, allowing up to 256 total addresses (0~255). It also means that there are up to 256 dome cameras that can cascade on the RS-485 bus. The dip switch setting and the indicated address are represented in the following diagram.

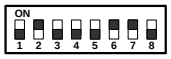
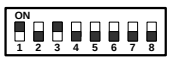
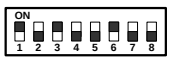
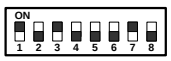
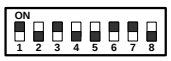
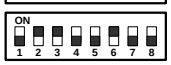
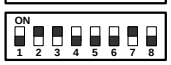
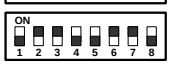
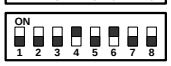
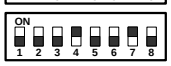
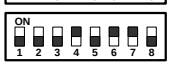
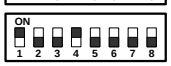
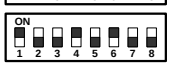
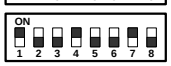
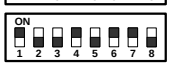
Note: The factory default address is 1.

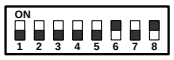
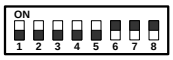
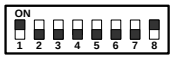
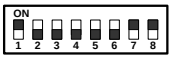
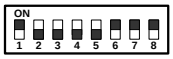
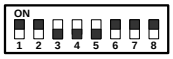
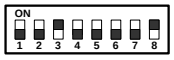
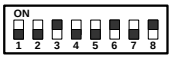
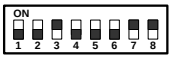
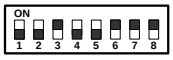


Note: You will see the label of Protocol & Baud Rate as well as RS-485 ID address show on the speed dome. For example: for EVF protocol, white keys are all switched downward; for ID Address 0, white keys are all switched downward.



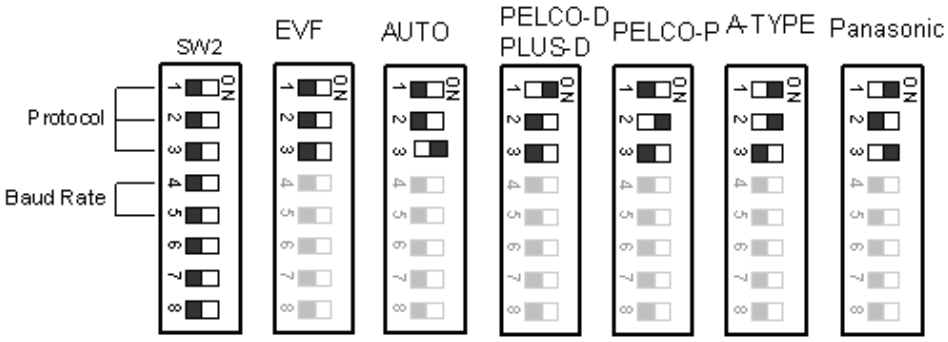


Switch	Address	Switch	Address	Switch	Address	Switch	Address
	0		32		64		96
	1		33		65		97
	2		34		66		98
	3		35		67		99
	4		36		68		100
	5		37		69		101
	6		38		70		102
	7		39		71		103
	8		40		72		104
	9		41		73		105
	10		42		74		106
	11		43		75		107
	12		44		76		108
	13		45		77		109
	14		46		78		110
	15		47		79		111
	16		48		80		112
	17		49		81		113
	18		50		82		114
	19		51		83		115
	20		52		84		116
	21		53		85		117
	22		54		86		118
	23		55		87		119
	24		56		88		120
	25		57		89		121
	26		58		90		122
	27		59		91		123
	28		60		92		124
	29		61		93		125
	30		62		94		126
	31		63		95		127

Switch	Address	Switch	Address	Switch	Address	Switch	Address
	128		160		192		224
	129		161		193		225
	130		162		194		226
	131		163		195		227
	132		164		196		228
	133		165		197		229
	134		166		198		230
	135		167		199		231
	136		168		200		232
	137		169		201		233
	138		170		202		234
	139		171		203		235
	140		172		204		236
	141		173		205		237
	142		174		206		238
	143		175		207		239
	144		176		208		240
	145		177		209		241
	146		178		210		242
	147		179		211		243
	148		180		212		244
	149		181		213		245
	150		182		214		246
	151		183		215		247
	152		184		216		248
	153		185		217		249
	154		186		218		250
	155		187		219		251
	156		188		220		252
	157		189		221		253
	158		190		222		254
	159		191		223		255

2.3.2. Communication Protocol Setting

The 1st, 2nd and 3rd bits are used to set communication protocol. The factory default protocol is EVF.



Notice: If all protocol switches are set to ON, the EPTZ will enter a self-test mode.

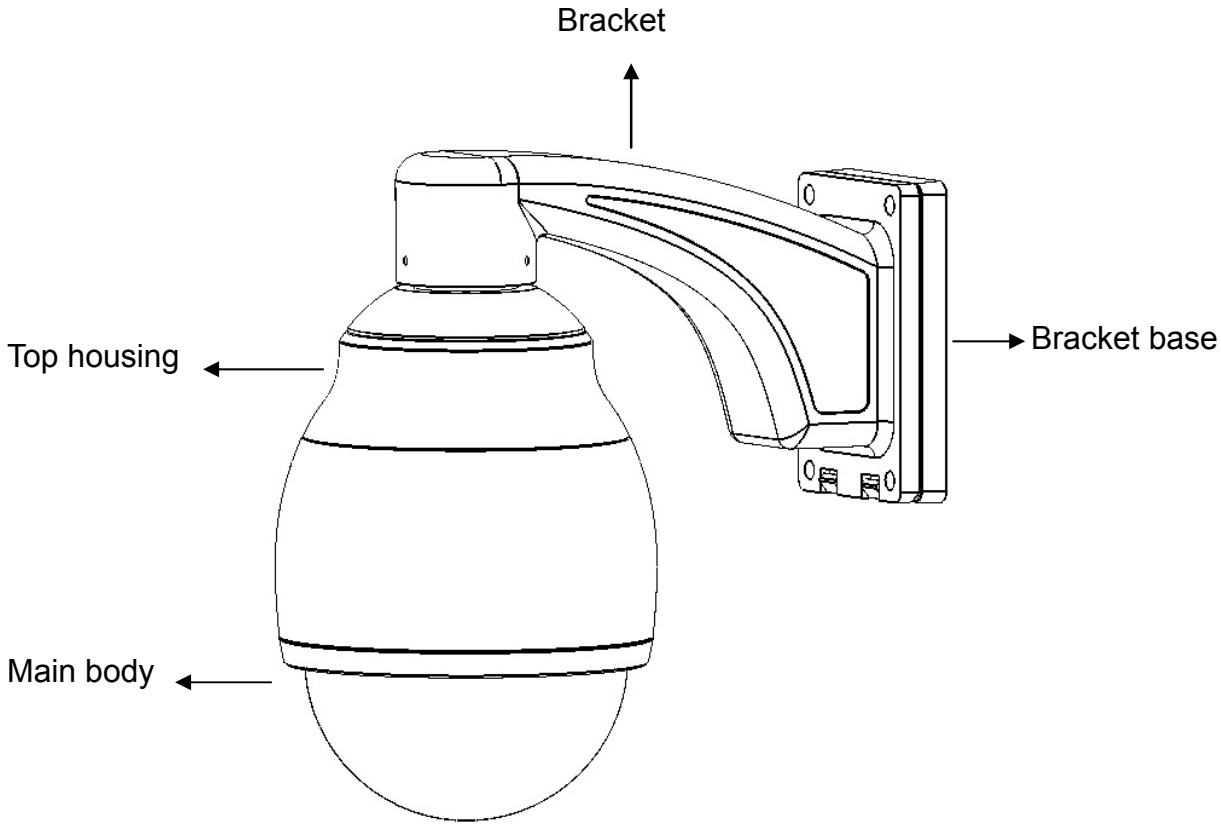
2.3.3. Transmission Speed Setting (Baud Rate Setting)

The 4th and 5th bits on the PCB board are used to set the Baud Rate. The default baud rate setting is 9600.

2.4. Bracket and Speed Dome Installation

2.4.1. Installation Requirements

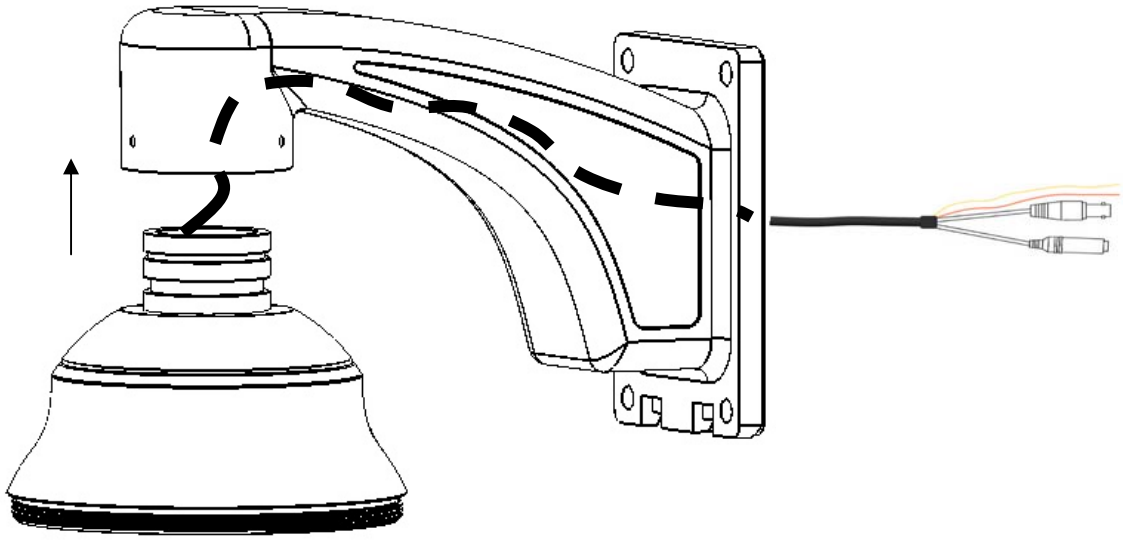
1. Installation should be handled by a qualified service agent and should comply with all local regulations. Service personnel should expect potential problems such as surface strength, surface material, falling objects, outer breaches, building vibration or other similar conditions.
2. Check for all necessary materials, and ensure if the selected installation location is suitable for the EPTZ.



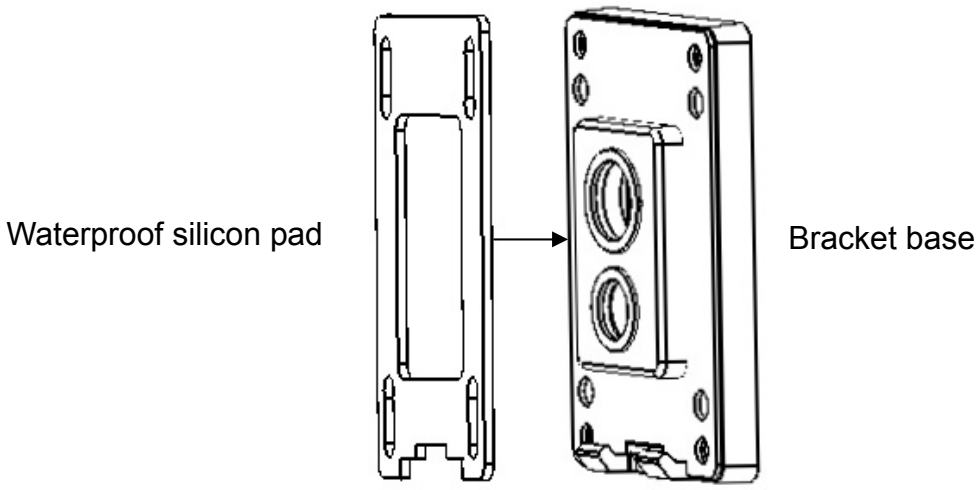
ETPZ overview

2.4.2. EPTZ Dome Camera Wall Mount Simple Installation

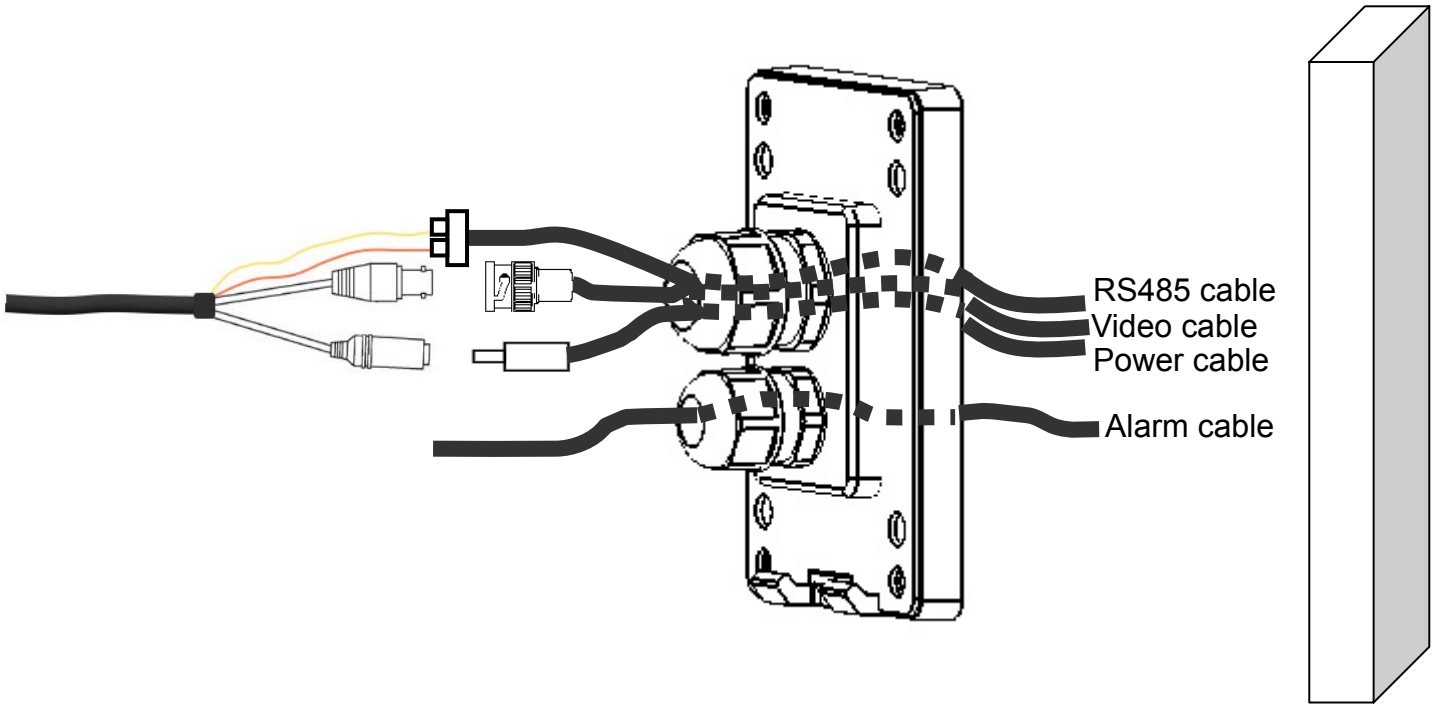
1. Screw the top housing to bracket and secure it using the included hexagon wrench.



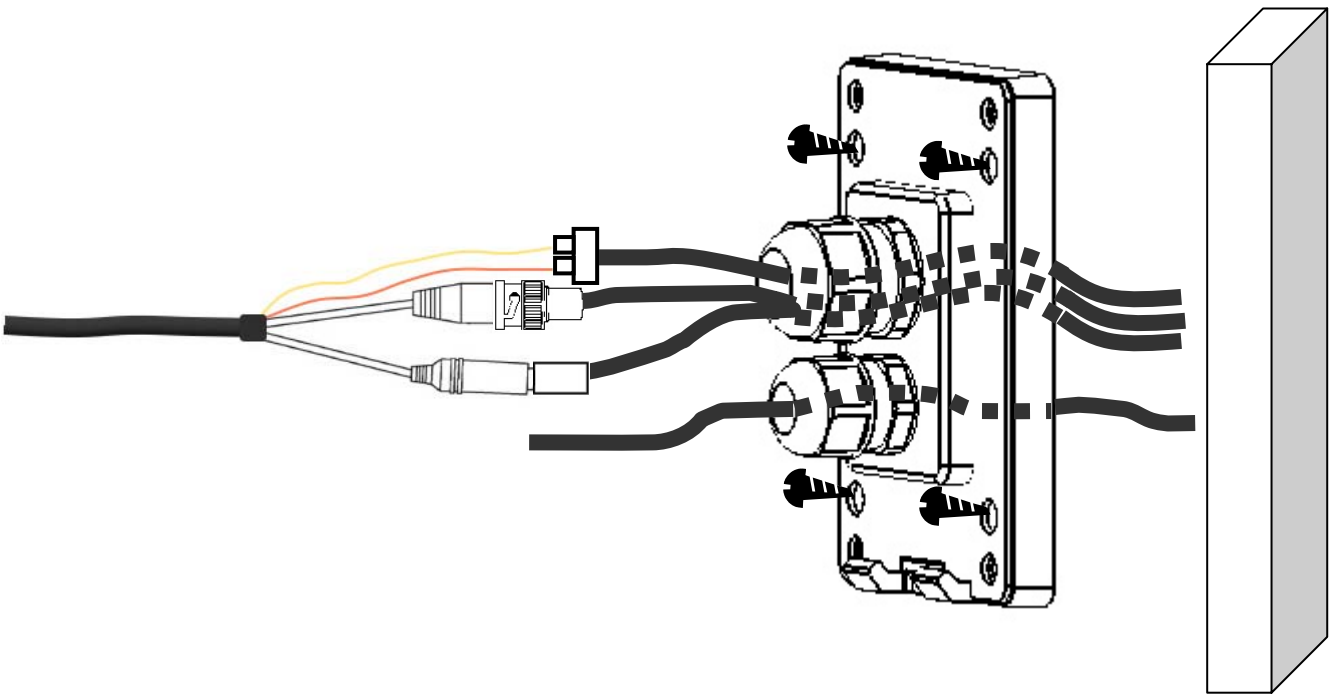
2. Put the waterproof silicon pad on top of the bracket base for waterproof purpose.



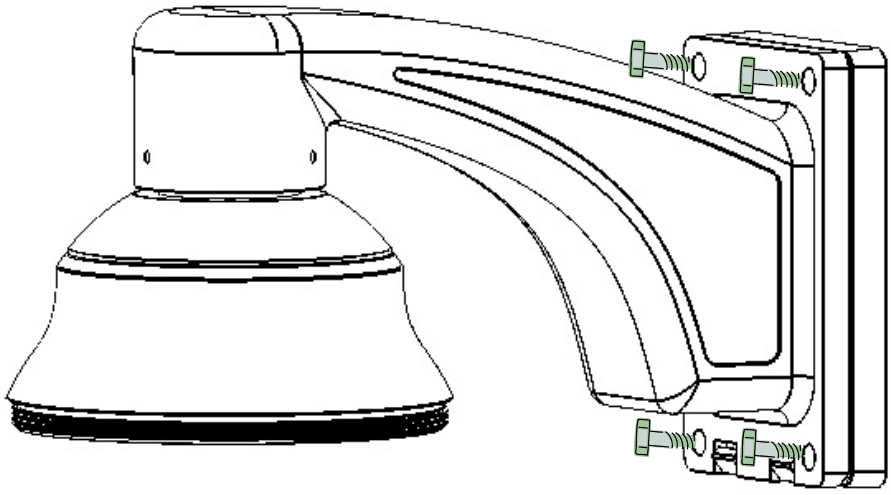
3. Connect the RS485, video, and power cables through the top hole of the base board. If necessary, connect the alarm cable as well using the bottom hole.



4. Screw in 4 screws for mounting the bracket base.



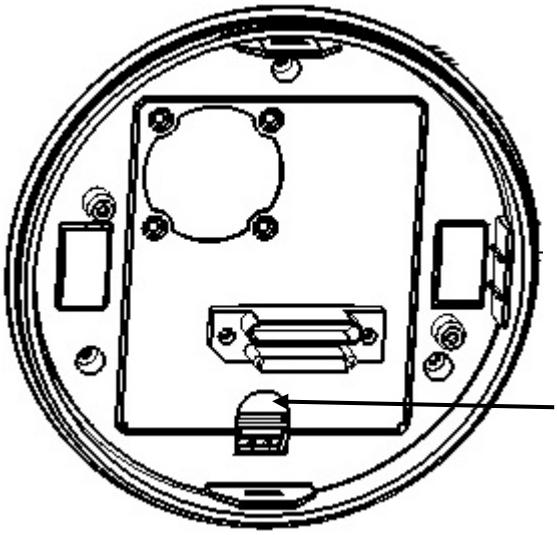
5. Screw in 4 long screws to fix the bracket to bracket base.

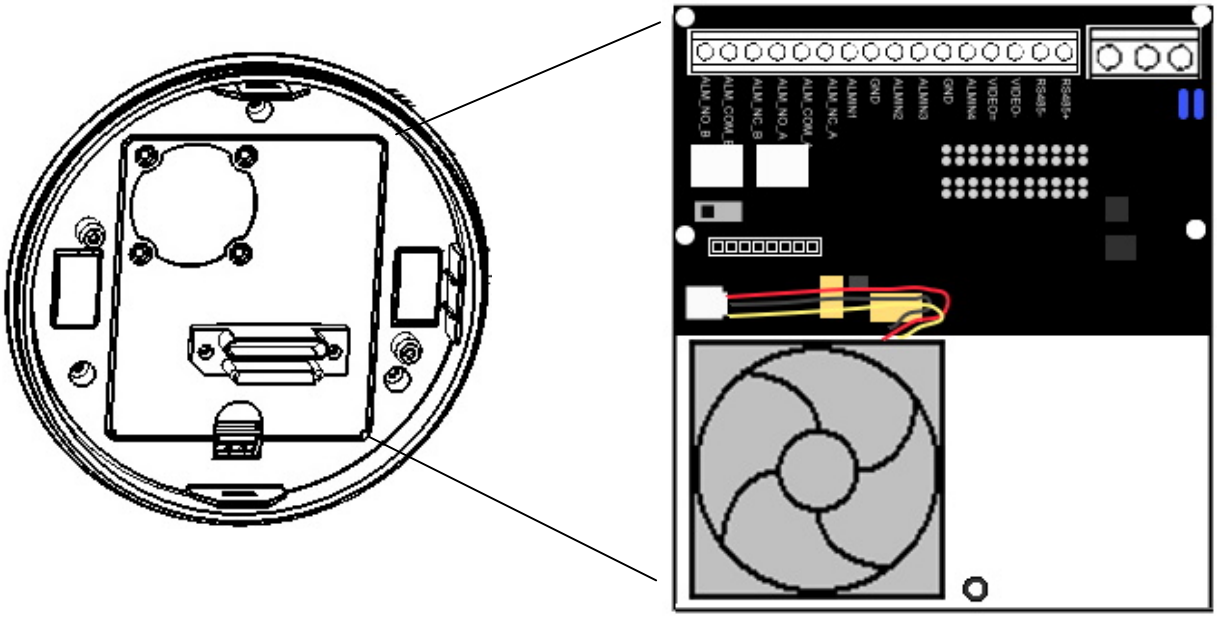


2.4.3. EPTZ Dome Camera Wall Mount Installation

Note: Installations on a wall, pole, or ceiling must be able to support at least five times the weight of the full camera assembly (about 16kg).

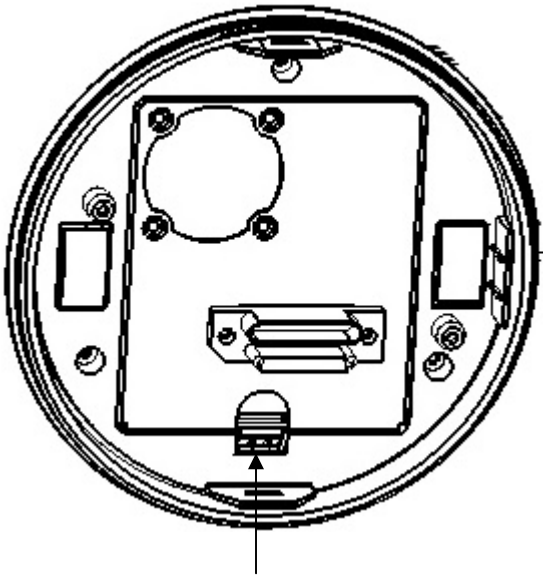
1. Pull the hole of the base board to open it. Detach the power and RS485 wires first by using a screw driver.





2. Apply the adhesive stripe at back of desiccant pack to the inner side of the top housing. Three packs are included in the package.

3. When the desiccant packs are pasted and the alarm and video cables are reconnected, return the base board to its original position. You will need to pull open the switch again in order for it to fit properly.

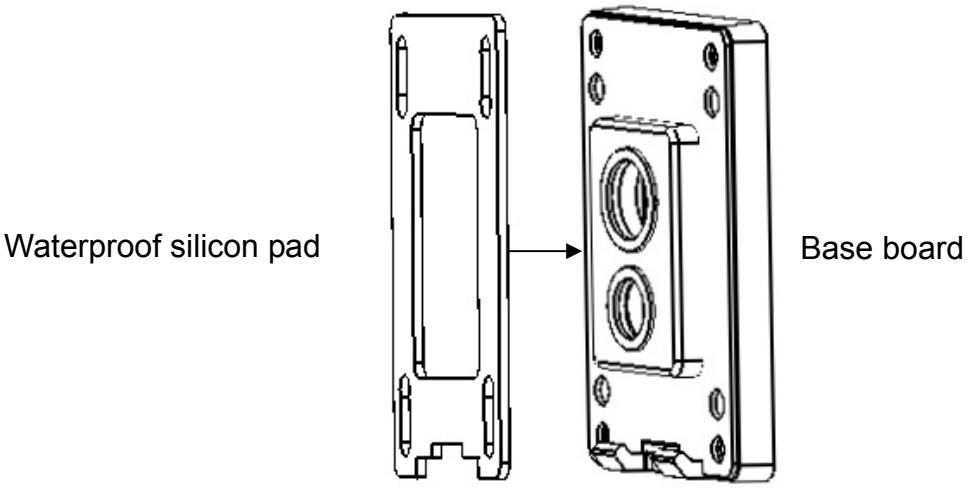


Pull open this switch

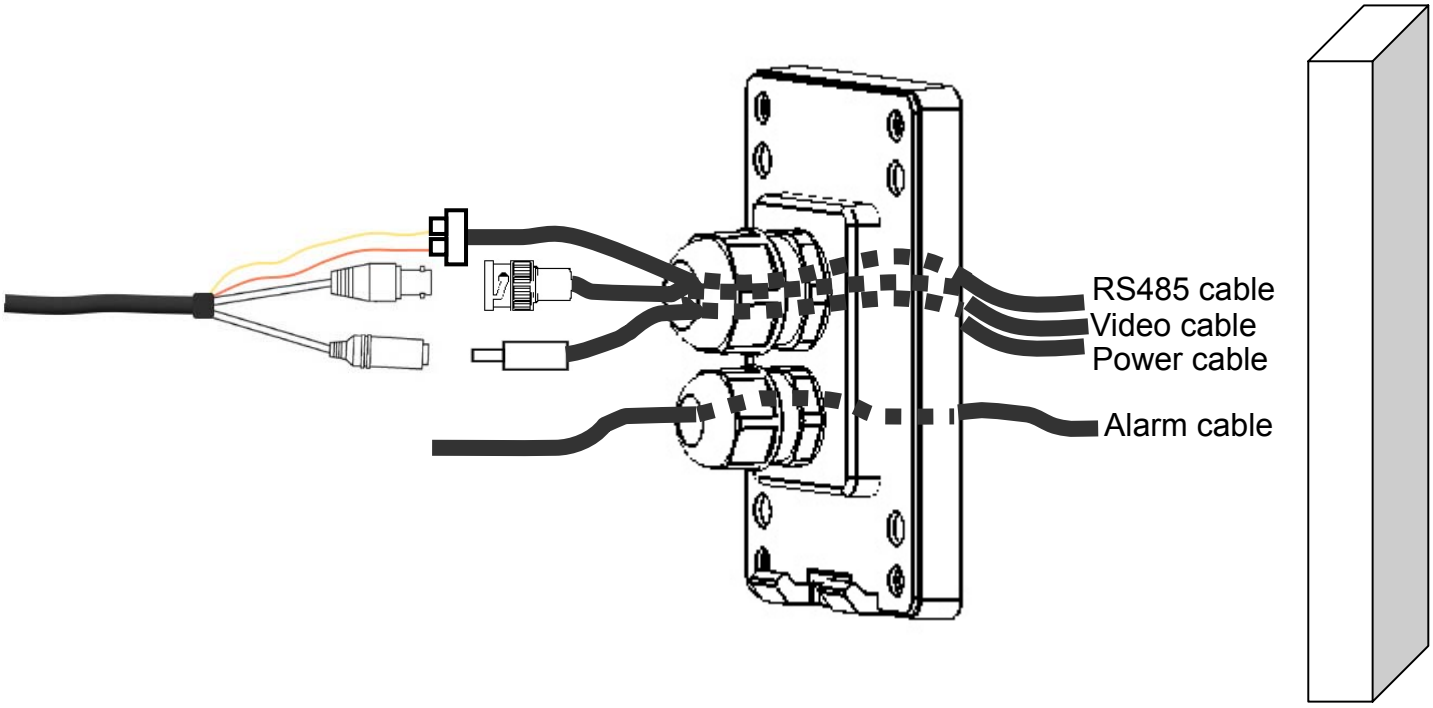
Note:

To close the base board, please push the base board twice consequently to lock it up.

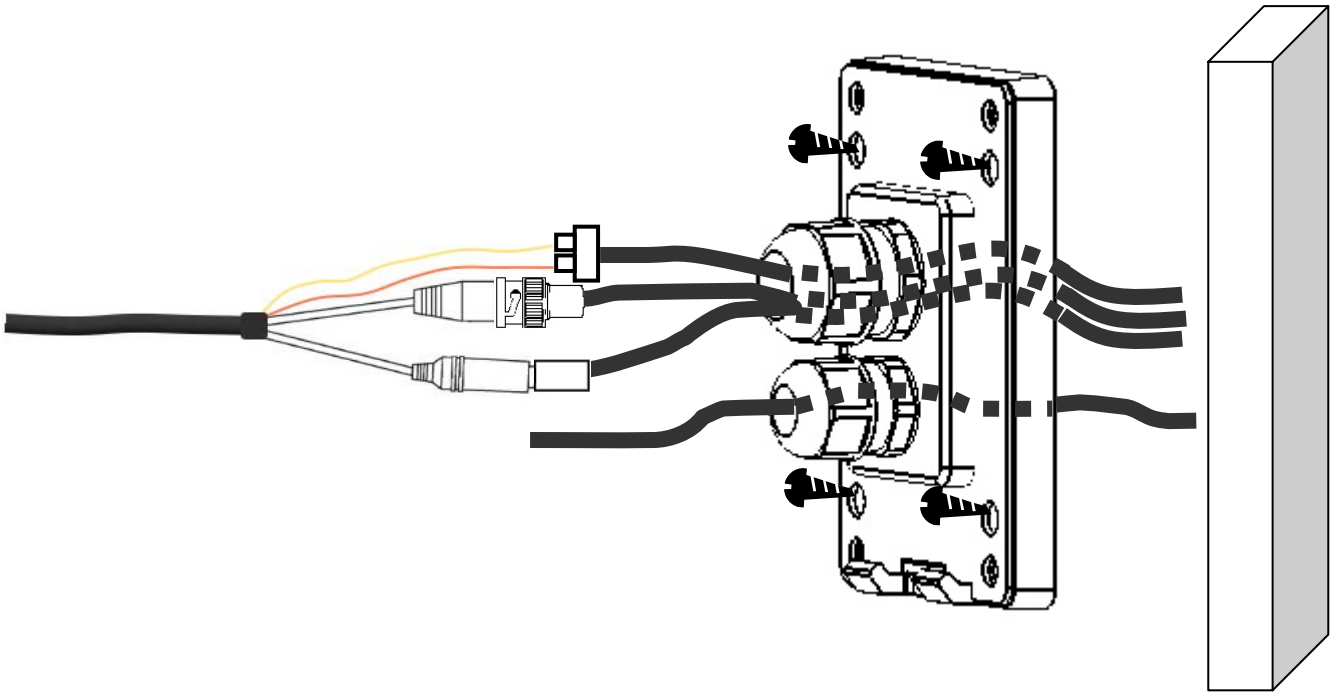
4. Put the waterproof silicon pad on top of the base board for waterproof purpose.



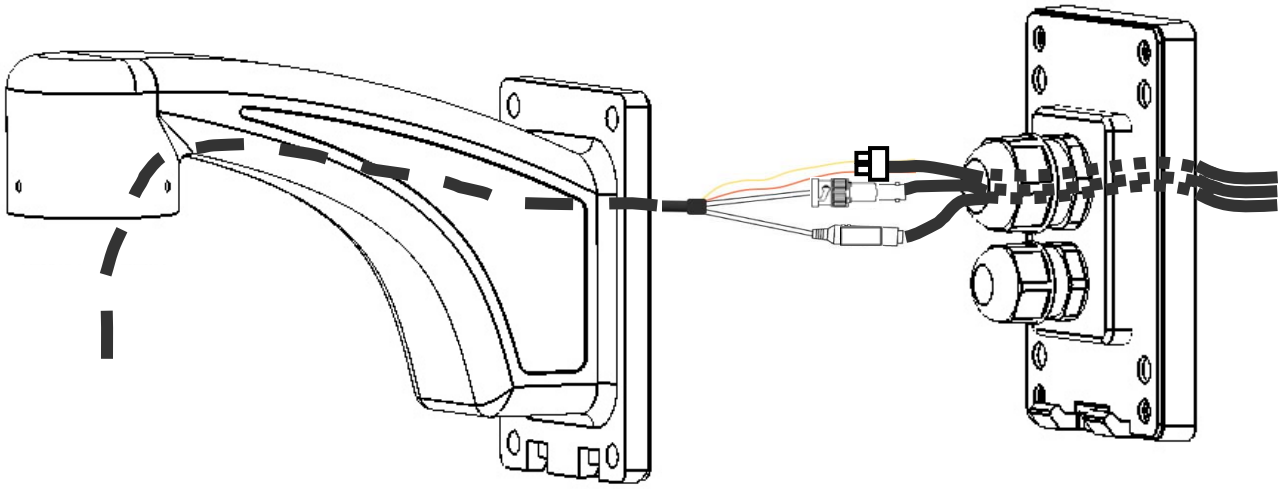
5. Connect the RS485, video, and power cables through the top hole of the base board. If necessary, connect the alarm cable as well using the bottom hole.



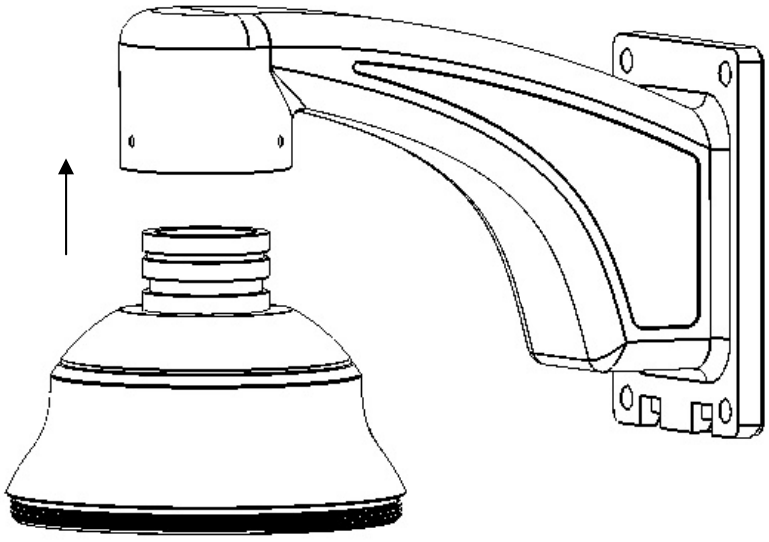
6. Screw in 4 screws for mounting the bracket base.



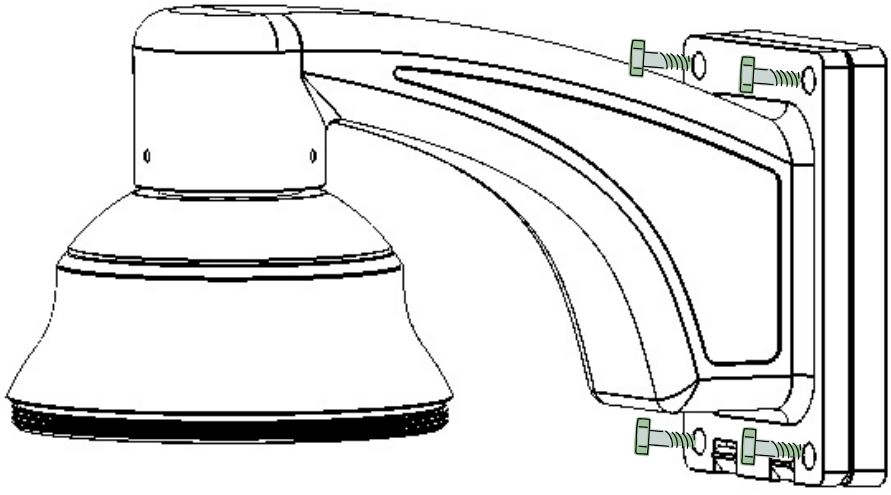
7. Thread the cable through the bracket.



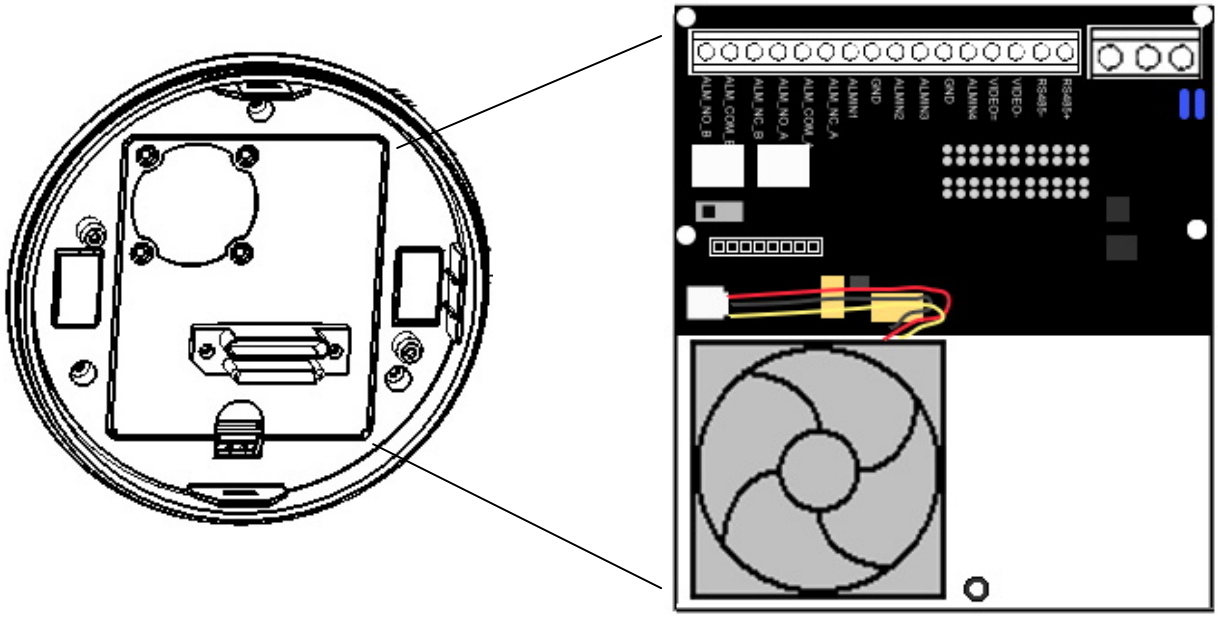
8. Screw the top housing to bracket by using a hexagon wrench.



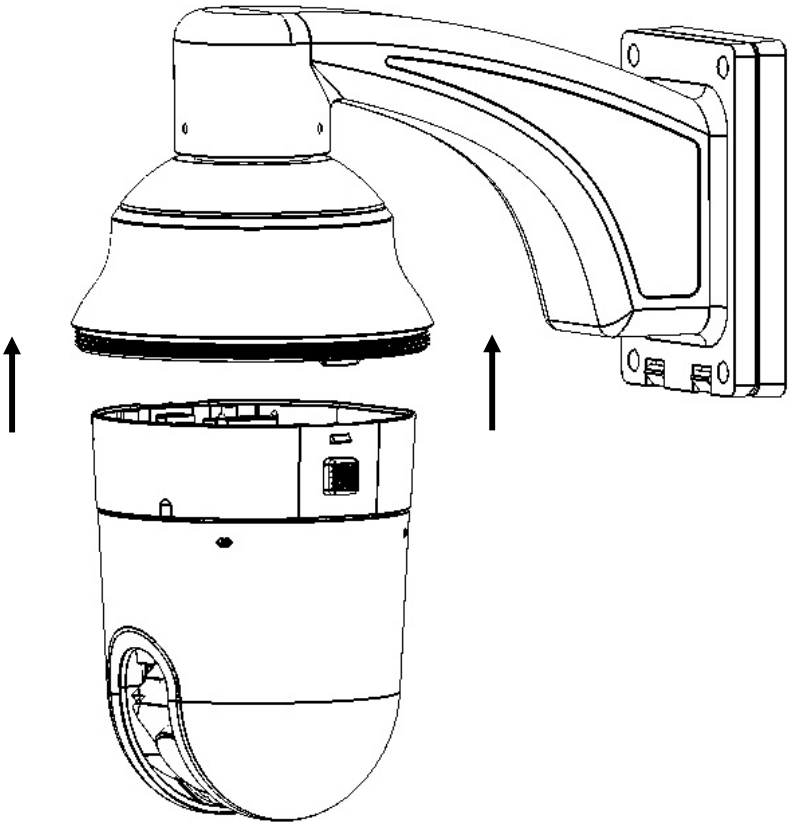
9. Screw in 4 long screws to fix the bracket to bracket base.



10. Pull the hole of base board to open it again. Connect the power and RS485 wires back to power pin and RS485 pin. If you need to connect alarm, connect alarm cable to alarm pin.



11. Hold and push the main body toward the bracket until it is firmly fixed to the bracket. To release it, press orange buttons at both sides of the body.



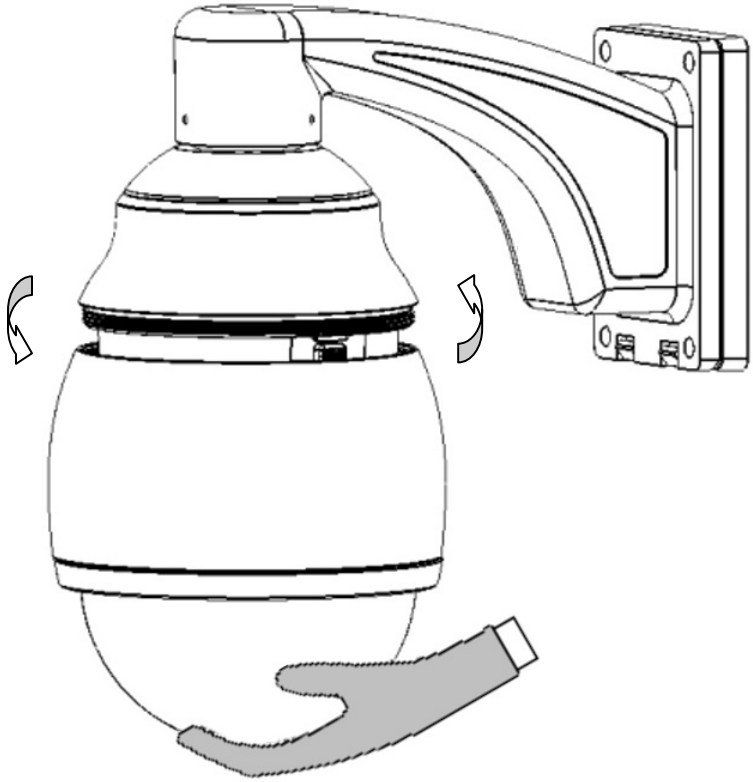
Note 1:

When you push the orange buttons to detach the main body from bracket, please hold the main body carefully, otherwise it may fall down.

Note 2:

Aim the Arrow label of the main body to the same Arrow label of the bracket when you need to push the main body toward bracket.

12. Twist the cover of main body to top housing clockwise until it is firmly fixed to top housing.



Note 1: In order to protect the bubble from dirt and scrape, please put on the gloves before installing the bubble.

Note 2: The camera module on the mechanical part is very sensitive. Please be careful when installing this part.

13. Turn on the power, and start to operate the EPTZ.

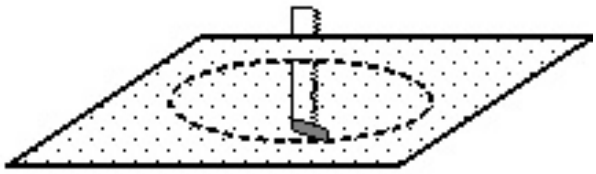
Note: When turning on the power, EPTZ will enter self-inspection mode, and carry out a self-testing program. After finishing self-inspection, you can start to operate the EPTZ.

2.4.4. EPTZ Dome Camera Ceiling Mount Installation

(Indoor Recessed Mount Bracket & Surface Ring)

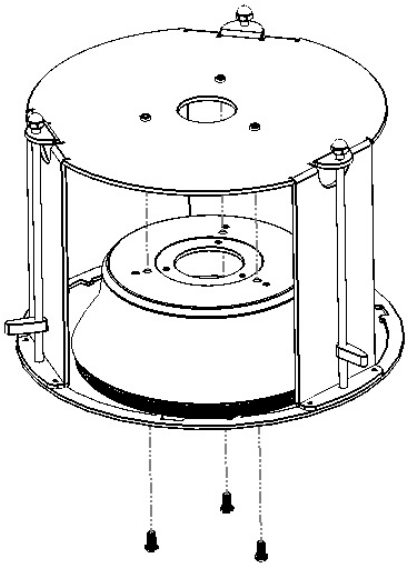
The indoor recessed mount bracket and surface ring are used for ceiling mount installation. Installation steps are described below:

1. Use the ceiling template provided to cut the ceiling.

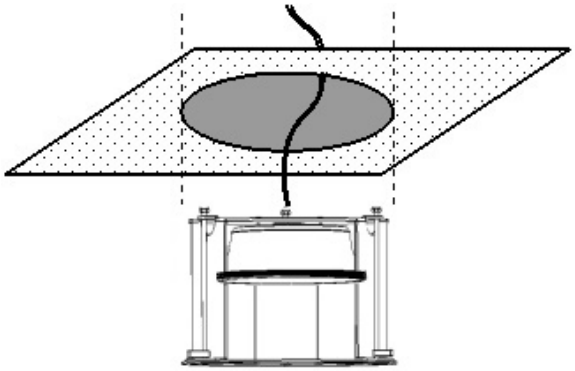


Cut the ceiling

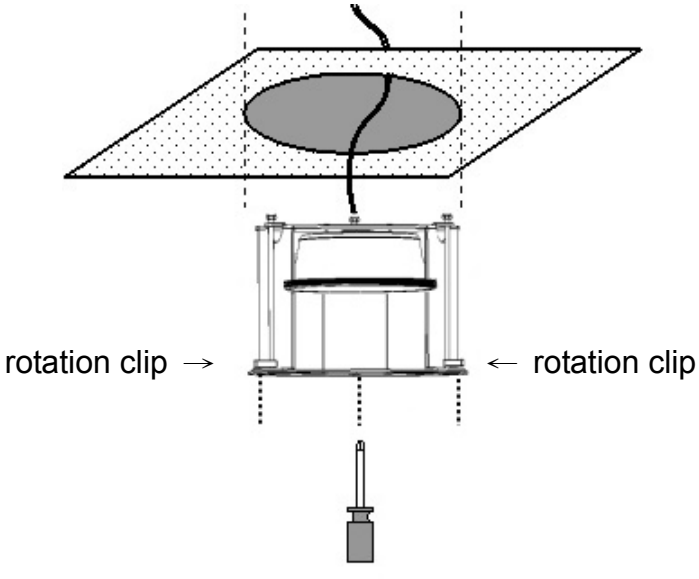
2. Screw the 3 screws of EPTZ top housing to the 3 holes of indoor recessed mount bracket.



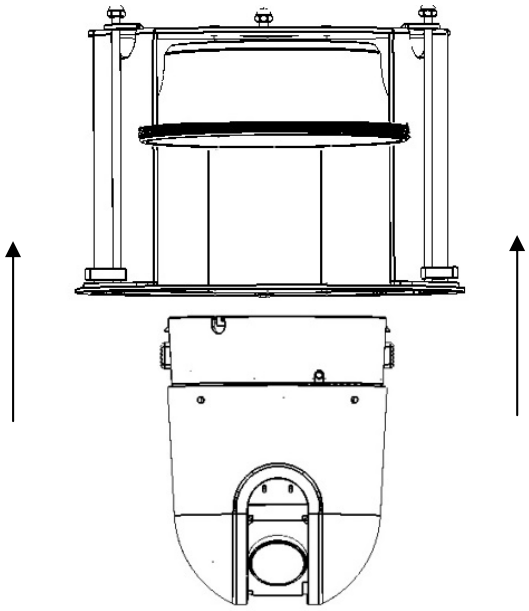
3. Put the indoor recessed mount bracket to the hole that you just made on ceiling.



4. Use a screwdriver to turn the rotation clips (x 3) until they firmly fix to the ceiling.



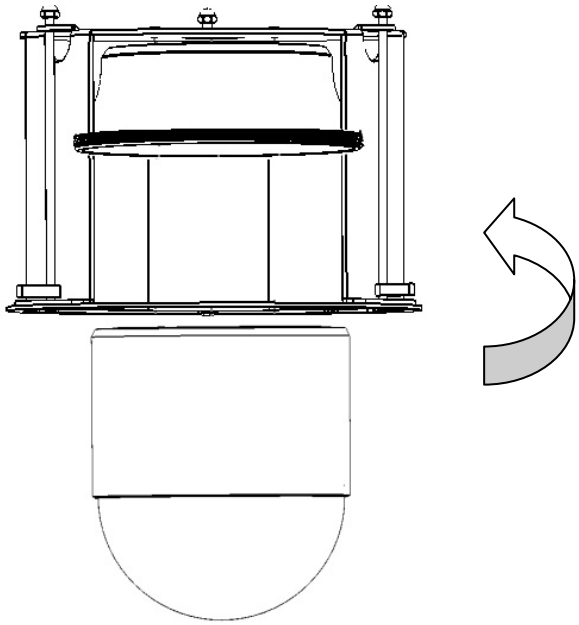
5. Snap main body to the indoor recessed mount bracket.



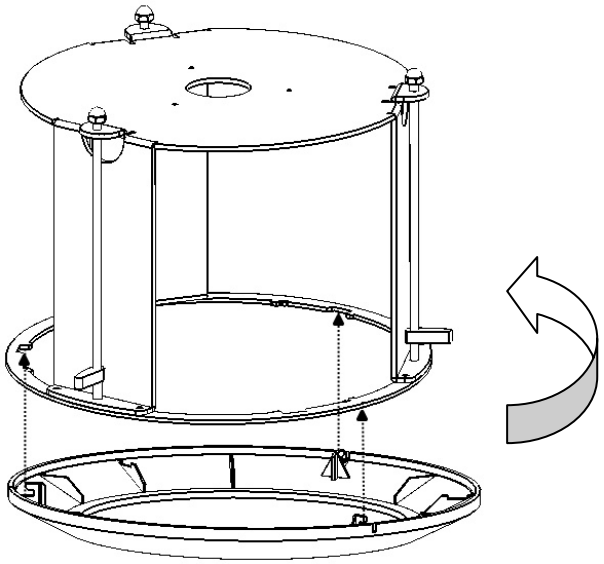
NOTE:

Aim the Arrow label of the main body to the same Arrow label of the bracket when you need to push the main body toward bracket.

6. Turn the housing of speed dome until it fixes to the top housing.



7. Aim bracket’s fillister to surface ring’s fillister, turn it until it is firmly fixed.



2.5. Bracket & Adapter

2.5.1. Indoor Ceiling Pendent Mount Bracket

The indoor ceiling pendent mount bracket is used for installing a speed dome on the ceiling.

2.5.2. Pole Mount Adapter

The pole adapter is used for installing a wall mount bracket to a pole indoors or outdoors.

2.5.3. Corner Mount Adapter

The corner mount is used for installing a wall mount bracket to a 270° corner of walls indoors or outdoors.

2.5.4. Indoor Concrete Ceiling Mount Adapter

Indoor Concrete Ceiling Mount Adapter is used for indoor installation to concrete ceiling.

3. EPTZ3600 SERIES CAMERA SETUP MENU

This section will show how to navigate and set up the menu of the EPTZ3600/3600I.

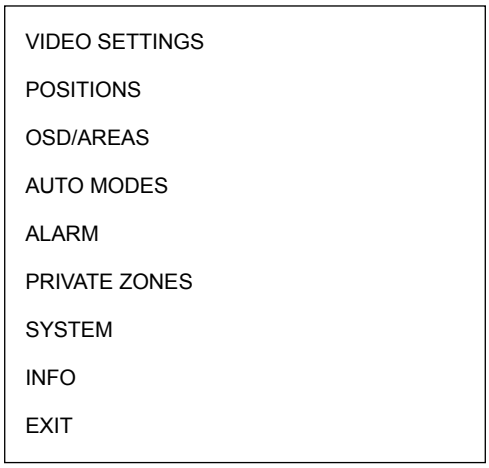
There are 9 items of the setting menu.

NOTE: The controls described in this section are based on using the EKB500 keyboard.

3.1. Structure of the Setup Menu

Press MENU to enter camera setup menu.

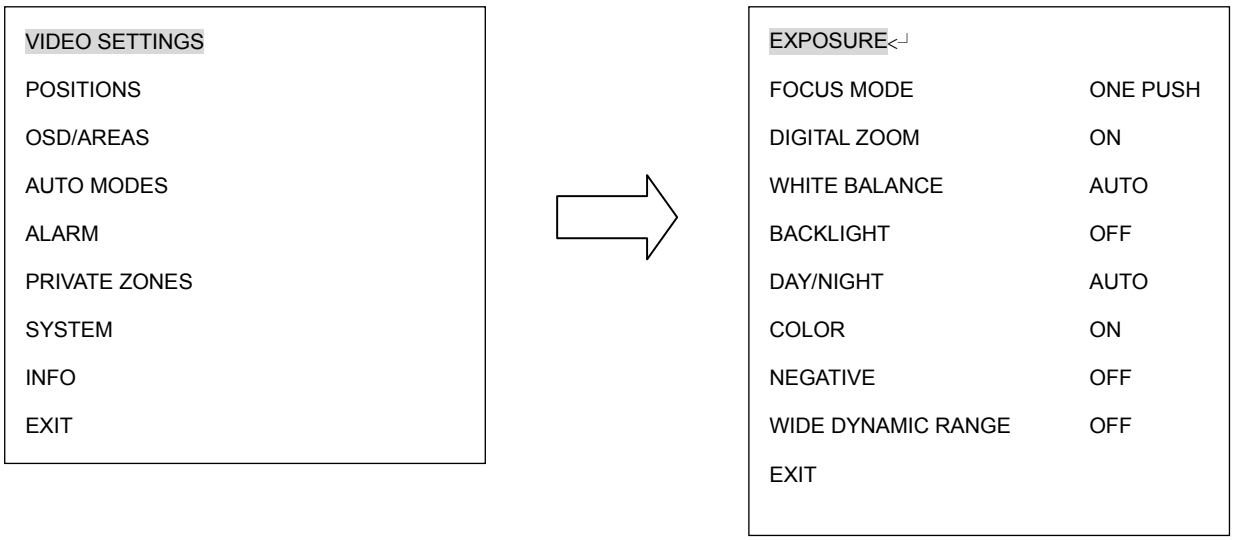
Turn the Joystick up/down to change subentries, and right/left to change the setting. If there is an arrow at the end of selection, it means that selection has a sub-menu, please press Enter key of keyboard to enter sub-menu.



(diagram 3.1)

3.2. VIDEO SETTINGS

In main menu, turn joystick Up / Down to select VIDEO SETTINGS. Turn joystick Left / Right to enter VIDEO SETTINGS sub-menu (see diagram 3.2).

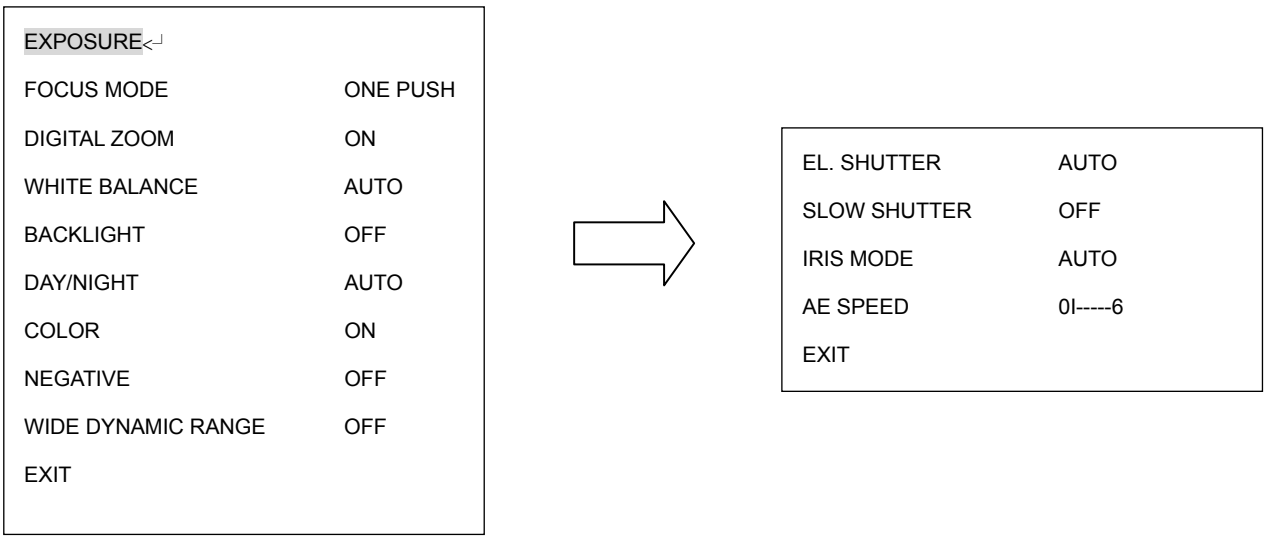


(diagram 3.2)

3.2.1. EXPOSURE

In Exposure menu, there is a sub-menu. Press Enter key or turn joystick Left / Right to enter Exposure sub-menu.

There are 4 options in Exposure: EL. SHUTTER, SLOW SHUTTER, IRIS MODE, and AUTO GAIN CTRL.



(diagram 3.3)

EL.SHUTTER: Select electronic shutter mode from the options of the menu. There are AUTO, A.FLK , 1/60, 1/180 , 1/250 , 1/1000 , 1/3000 and 1/10000 at NTSC model; and AUTO, A.FLK, 1/50, 1/150, 1/215, 1/1000, 1/2500 and 1/10000 at PAL model.

AUTO: Auto electrical shutter

A.FLK: Anti-Flicker. Camera will auto adjust the shutter to reduce the flicker caused by fluorescent light.

1/60 (NTSC) and 1/50 (PAL): default manual shutter.

1/180: 1/180 sec shutter for NTSC and 1/150**:** 1/150 sec shutter for PAL

1/250: 1/250 sec shutter for NTSC and 1/215**:** 1/215 sec shutter for PAL

1/1000: 1/1000 sec shutter for both NTSC and PAL

1/3000: 1/3000 sec shutter for NTSC and 1/2500**:** 1/2500 sec shutter for PAL

1/10000: 1/10000 sec shutter for both NTSC and PAL

SLOW SHUTTER: Slow electronic shutter. In order to enhance the view in the low lux environment, slow shutter allows more light go through the shutter. Select from AUTO and OFF.

AUTO: Auto Slow Shutter.

OFF: Disable Slow Shutter function.

NOTE: If EL. SHUTTER is selected, SLOW SHUTTER will be disabled.

IRIS MODE:

MANUAL: The brightness of the image can be adjusted manually.

AUTO: The brightness of the image signal will adjust automatically depending on the amount of light.

AE SPEED: if you select AUTO in slow shutter, you can set exposure time (move the

cursor between 0~6)

EXIT: Select Exit to save settings and exit from current page.

3.2.2. FOCUS MODE

In Focus mode, we define focus type from **ONE PUSH, AUTO** and **Manual**.

ONE PUSH: Enable the one push trigger focus mode. The focus lens holds the same position until the next trigger command is received. This function prevents the wrong focus in dark.

AUTO: Auto focus is enabled. It automatically adjusts the focus position to maximize the high frequency content of the picture in a center measurement area, taking into consideration the high luminance and strong contrast components.

MANUAL: Enable the manual focus mode.

3.2.3. DIGITAL ZOOM

Digital zoom enable or disable.

ON: Enable a digital zoom.

OFF: Disable a digital zoom.

3.2.4. WHITE BALANCE

White Balance has the following modes:

AUTO: this mode computed the white balance value output using color information from the entire screen. It outputs the proper value using the color temperature radiating from a black subject based on a range of value from 3000 to 7500K.

INDOOR: 3200 K Base mode.

OUTDOOR: 5800 K Base mode.

3.2.5. BACKLIGHT

This is the function of Back Light Compensation. When the background of subject is too bright, or when the subject is too dark due to shooting in AE mode, back light compensation will make the subject appear clearer.

ON: Enable Back Light Compensation.

OFF: Disable Back Light Compensation.

3.2.6. DAY/NIGHT

In Day/Night, we define the ICR (IR Cut-Removable) mode settings. The camera has a built-in infrared (IR) cut-filter which can be disengaged from the image path for increased sensitivity in low light environments.

Select from **AUTO, DAY** and **NIGHT**

NIGHT: IR cut filter is always removed (ICR ON).

DAY: IR cut filter is always attached (ICR OFF).

AUTO: Auto Day/Night mode switch. The camera will automatically switch the settings needed for attaching or removing the IR cut filter. At a certain level of darkness, the IR cut-filter will be disabled and increase the infrared sensitivity (ICR ON). At a certain level of brightness, the IR cut-filter will reactivate automatically (ICR OFF).

3.2.7. COLOR:

In Color, we define color of the image.

Select from **ON** and **OFF**.

ON: Color image

OFF: B/W image

3.2.8. NEGATIVE

In Negative mode, it will switch ON/OFF the negative art image output.

Select from **ON** and **OFF.**

ON: Enable Negative function

OFF: Disable Negative function

3.2.9. WIDE DYNAMIC RANGE

In Wide Dynamic Range, we define wide dynamic range from **ON** and **OFF.** This function is effective when shooting images against the sun or any other bright light source. When both bright and dark areas exist in an image, WDR allows both areas to be seen clearly.

ON: Enable wide dynamic range

OFF: Disable wide dynamic range.

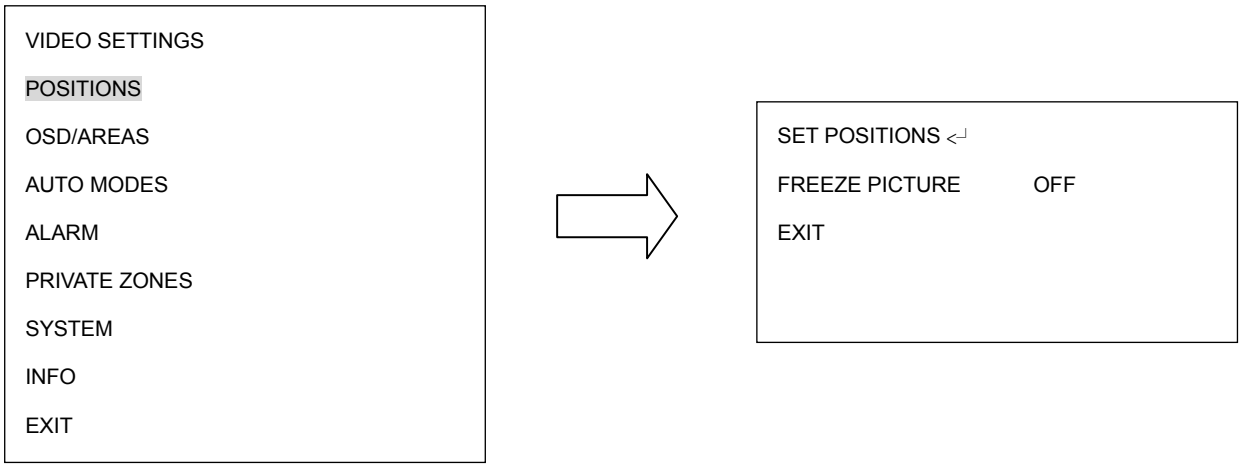
Notice: When the wide dynamic range is ON, some part of the image may appear solarized. This is normal for the wide dynamic range, and is not a camera malfunction.

3.2.10 EXIT

Select Exit to save settings and exit from current page.

3.3. POSITIONS

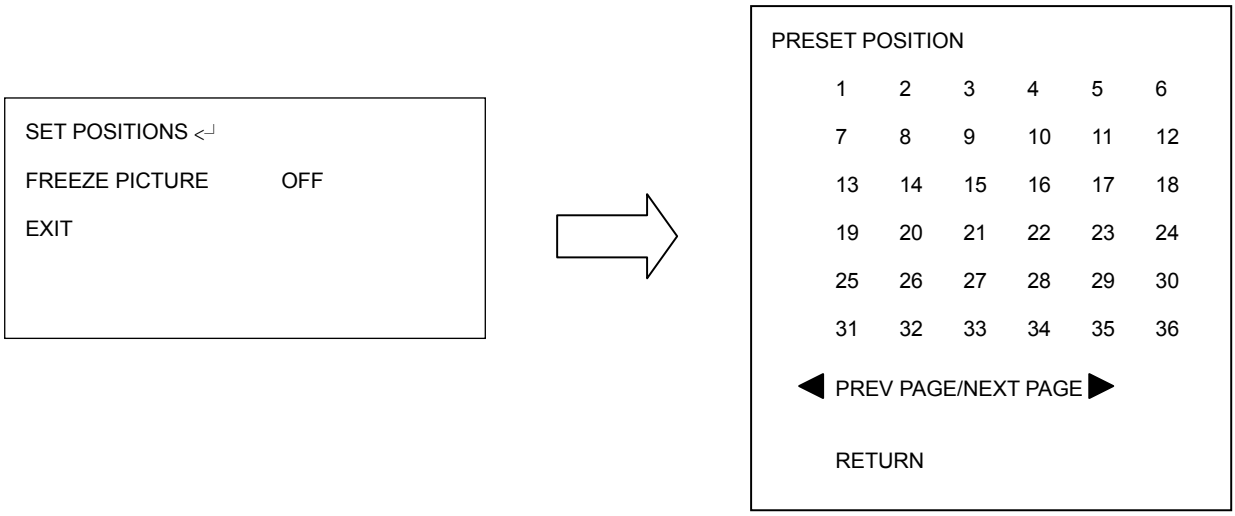
In main menu, turn joystick Up or Down to select POSITION option. Press Enter key or turn joystick Left / Right to enter POSITION sub-menu (See diagram 3.4).



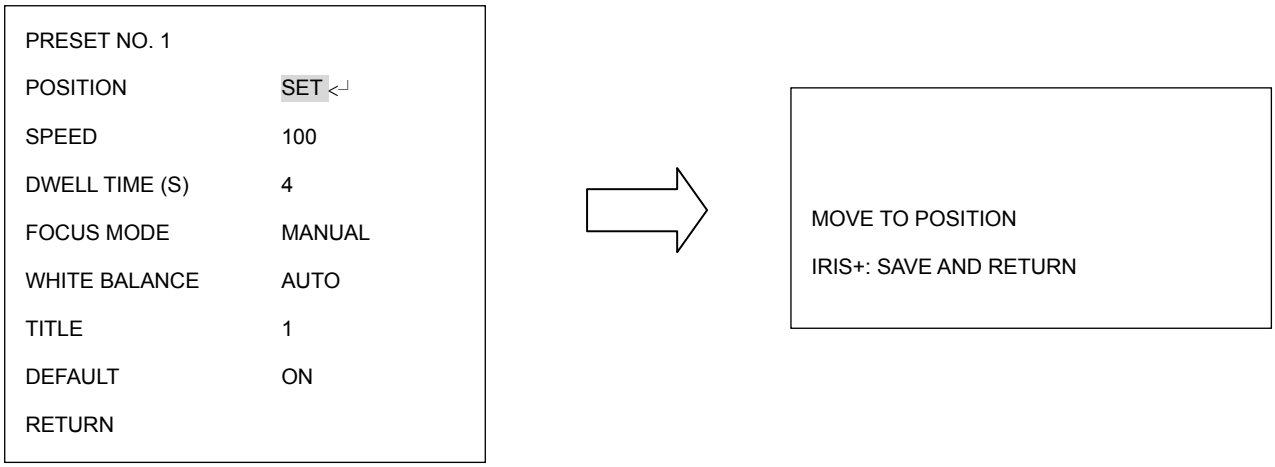
(diagram 3.4)

Press Enter key of keyboard to enter SET POSITIONS sub-menu.

Tilt the joystick left/right to highlight a preset position and press Enter to select it. There are a total of 36 presets per page. Once the position is selected, a star sign (*) will appear next to the number. When finished, go to RETURN and tilt the joystick left/right to go to the Preset options.


SET POSITIONS ↵
FREEZE PICTURE OFF
EXIT
PRESET POSITION
1 2 3 4 5 6
7 8 9 10 11 12
13 14 15 16 17 18
19 20 21 22 23 24
25 26 27 28 29 30
31 32 33 34 35 36
◀ PREV PAGE/NEXT PAGE ▶
RETURN

(diagram 3.5)

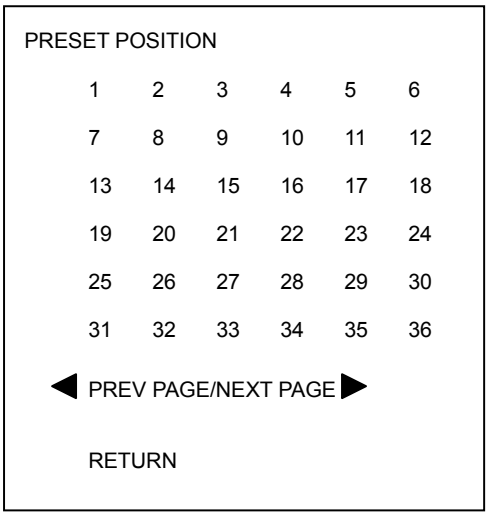


(diagram 3.6)

POSITION: Select from SET and CLEAR.

SET: Select SET and press Enter key of keyboard, you will be entered to a sub-menu. Turn the joystick to your desired position. Once the position is confirmed, press IRIS+ key of keyboard to save setting and return to previous menu. If position is set, there will be a star sign (*) beside position number.

Clear: Select Clear and press Enter key of keyboard, and the POSITION will be cleared. You will automatically go back to the sub-menu of PRESET POSITION. (see diagram 3.7).



(diagram 3.7)

SPEED: Select the speed for the preset position. The value is from 1 to 255 and 255 is the highest speed.

DWELL TIME (S): Select the dwell time (in second) for the preset position from 1 to 99.

FOCUS MODE: Select focus mode for the preset position from MANUAL, ONE PUSH and AUTO.

WHITE BALANCE: Select the white balance for the preset position from Auto, Indoor and outdoor.

TITLE: Enter title name for the preset position. Tilt the joystick up and down to scroll through the characters, then tilt left or right to move to the previous/next position. When finished, move the last digit and tilt the joystick right to return to previous screen.

DEFAULT: Select ON to set the preset position to default value.

FREEZE PICTURE: Image will stop at the previous position until the next position is reached.

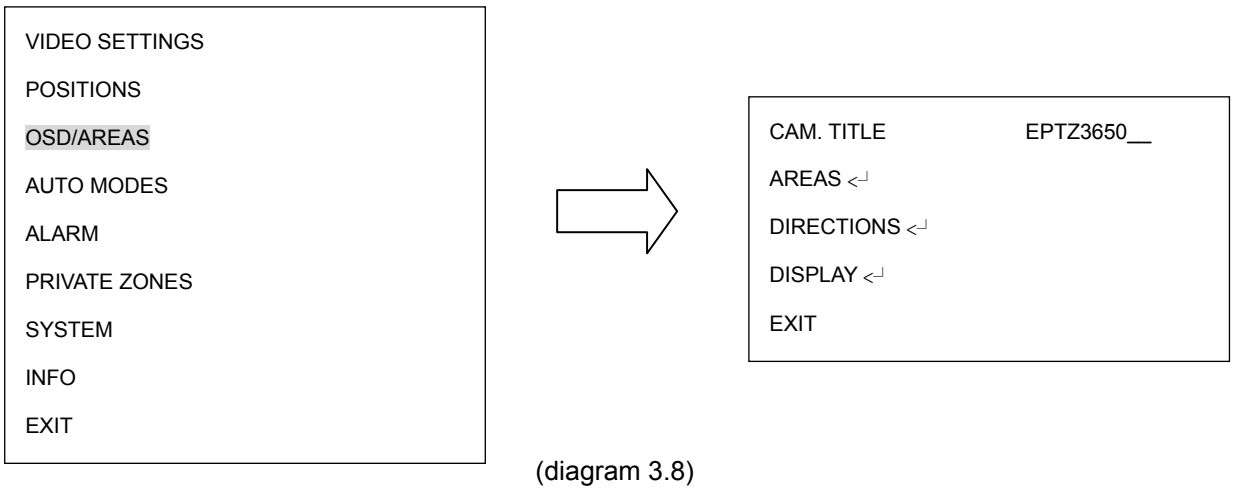
ON: freeze picture

OFF: disable freeze picture function.

EXIT: Select Exit to save settings and exit from current page.

3.4. OSD/AREAS

In main menu, turn joystick Up or Down to select OSD/AREAS. Turn joystick Left or Right to enter OSD/AREAS sub-menu (see diagram 3.8)



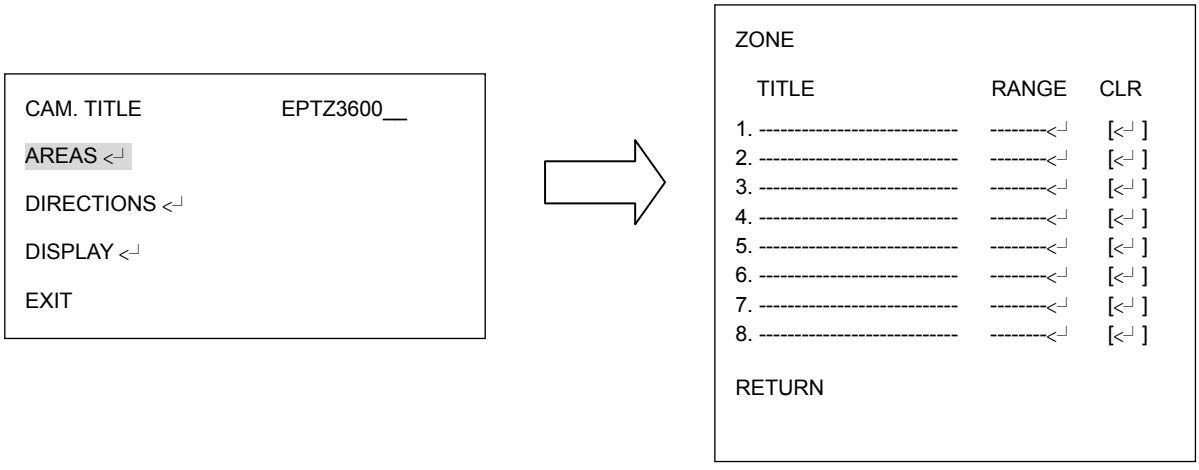
(diagram 3.8)

3.4.1. CAM. TITLE

Enter the title name for the camera, up to a maximum of 10 characters. Tilt the joystick up and down to scroll through the characters, then tilt left or right to move to the previous/next position. When finished, move the last digit and tilt the joystick right to return to previous screen.

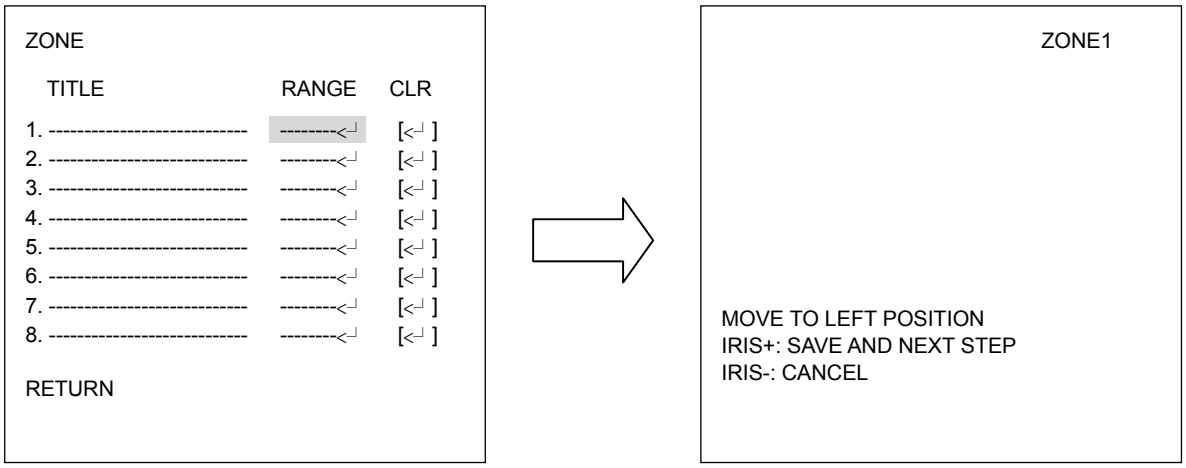
3.4.2. AREAS

Press Enter key of keyboard or turn joystick Left/Right to enter AREAS sub-menu.



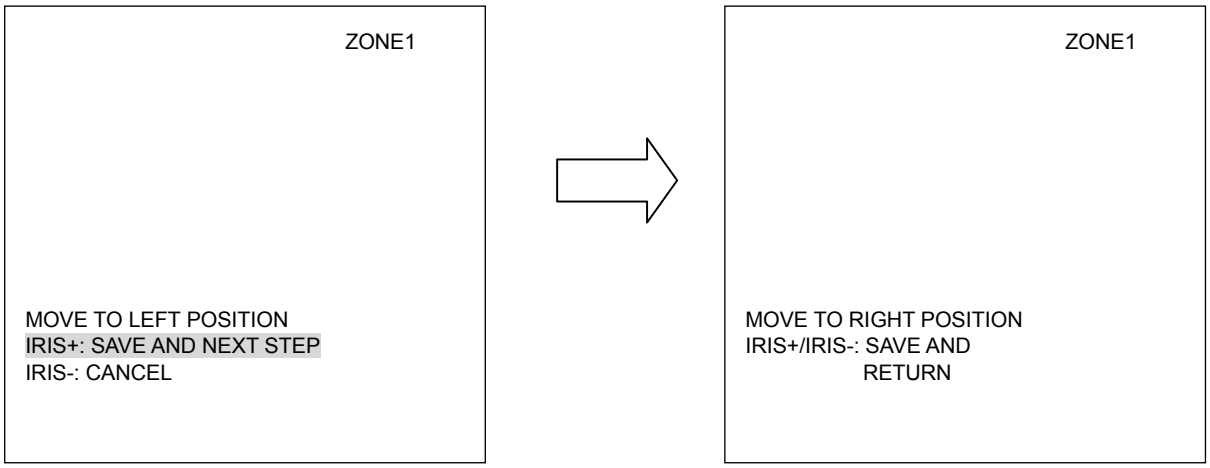
(diagram 3.9)

In zone menu, you can set a zone and name it, when the speed dome turns to the zone you set, it will display zone name on the screen (only if “OSD/AREAS->Display -> Zone” is set as “YES”). Tilt the joystick up and down to scroll through the characters, then tilt left or right to move to the previous/next position. When finished, tilt the joystick right to go to "Range" section, and press Enter key to enter Range sub-menu. Use the joystick to move speed dome to its left position. Press IRIS+ key to save left position setting and go to next step or press IRIS- to cancel.



(diagram 3.10)

Use the joystick to move speed dome to its right position. Press IRIS+ or IRIS- key to save and return.

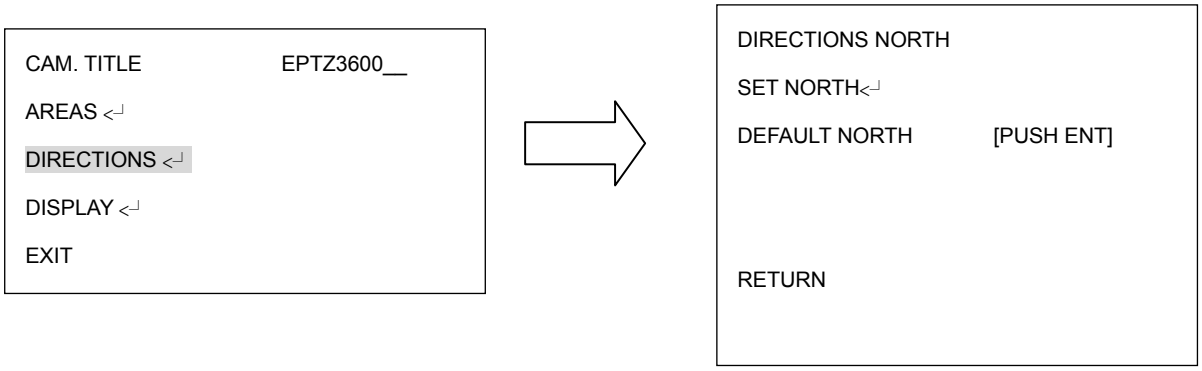


(diagram 3.11)

Tilt the joystick right or left to highlight the current zone or tilt up/down to select a different zone. If you wish to clear the zone you have set, go to “CLR” and press Enter key.

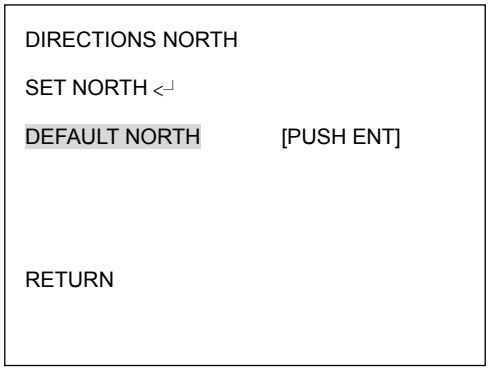
3.4.3. DIRECTIONS

Press Enter key of keyboard or turn joystick Left/Right to enter DIRECTIONS sub-menu (see diagram 3.12)



(diagram 3.12)

1. Press Enter key of keyboard or turn joystick Left/Right to enter Set North position menu.
2. Move the joystick to North position.
3. Press IRIS+ key of keyboard to save and return.



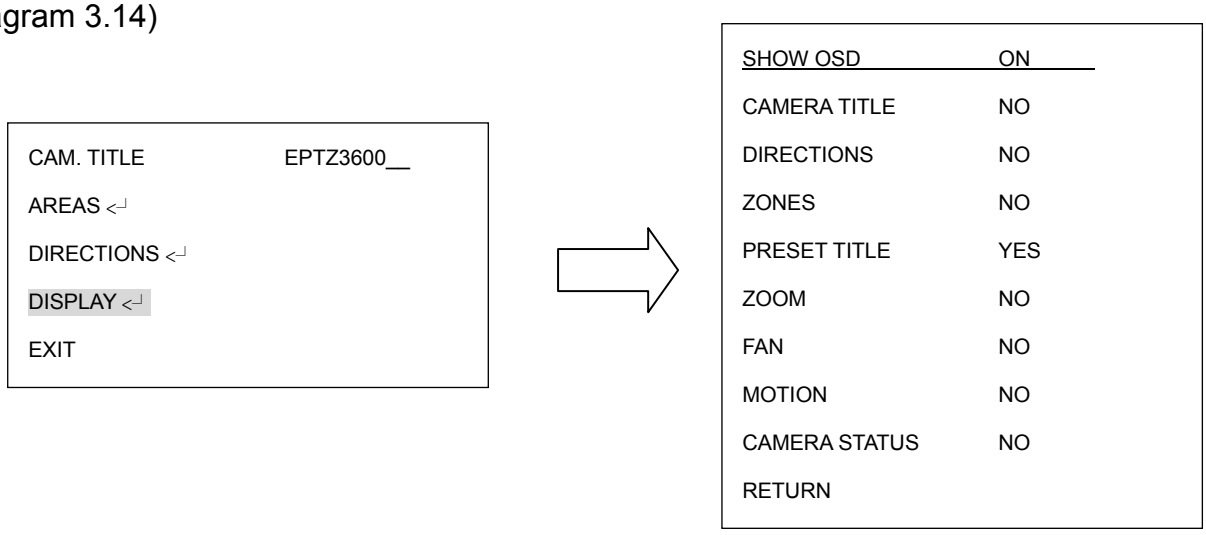
(diagram 3.13)

4. Go to “DEFAULT NORTH” and press Enter key to set the north position as default north position.

5. Go to Return and turn joystick Left/Right to return to previous menu.

3.4.4. DISPLAY

Press Enter key of keyboard or turn joystick Left/Right to enter DISPLAY sub-menu (see diagram 3.14)



(diagram 3.14)

1. SHOW OSD

   ON: show OSD of Camera Title, Directions, Zones, Preset Title, Motion, Zoom, Fan and Camera Status.

   OFF: do not show OSD.

   2 SEC: show OSD for 2 seconds.

   5 SEC: show OSD for 5 seconds.

   10 SEC: show OSD for 10 seconds.

2. CAMERA TITLE

   YES: show camera title

NO: do not show camera title

3. DIRECTIONS

YES: show directions

NO: do not show directions

4. ZONES

YES: show zones

NO: do not show zones

5. PRESET TITLE

YES: show preset title

NO: do not show preset title

6. ZOOM

YES: show zoom multiple when zoom in or zoom out.

NO: do not show zoom multiple.

7. FAN

YES: show fan indication when fan is enabled.

NO: do not show fan indication.

8. MOTION

YES: show motion message when a motion occurs.

NO: do not show motion message when a motion occurs.

9. CAMERA STATUS

YES: shows camera status

NO: do not show camera status

10. RETURN

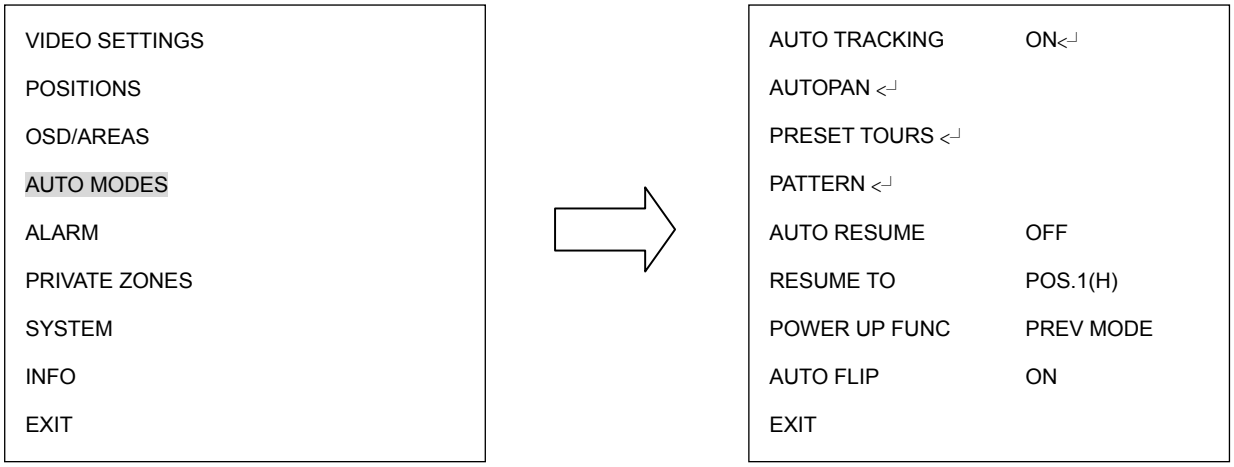
Turn joystick Left/Right to return to previous menu

3.4.5. EXIT

Select Exit to save settings and exit from current page.

3.5. AUTO MODES

In main menu, turn joystick Up/Down to select AUTO MODES. Turn joystick Left/Right to enter AUTO MODES sub-menu (See diagram 3.15)

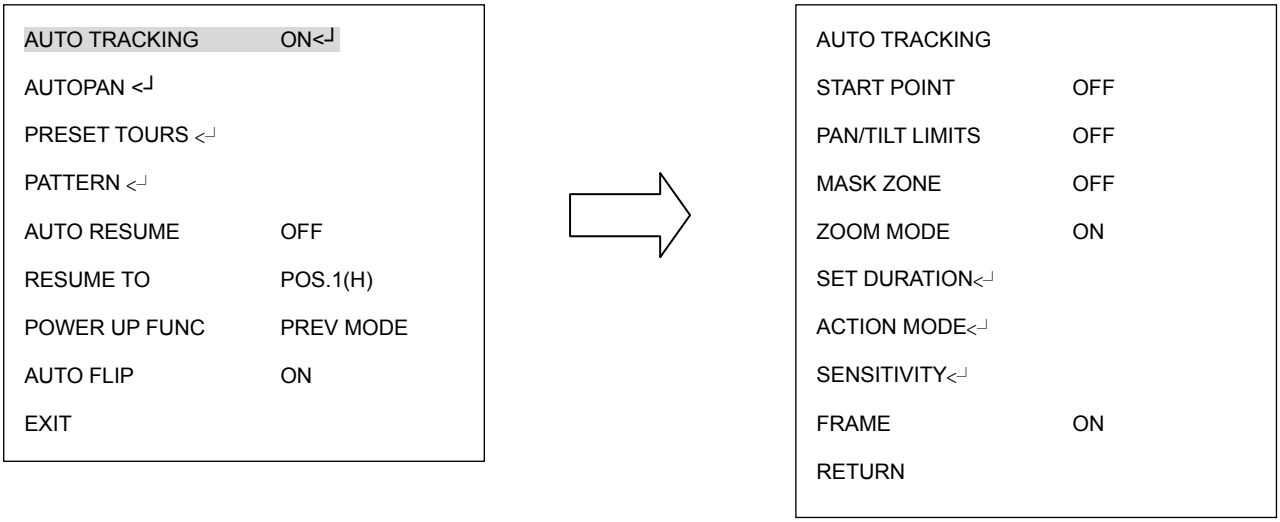


(diagram 3.15)

3.5.1. AUTO TRACKING (For Auto Tracking Model Only)

Turn joystick Left/Right to switch Auto Tracking on or off. When Auto tracking is on, press Enter key of keyboard to enter AUTO TRACKING sub-menu (see diagram 3.16).

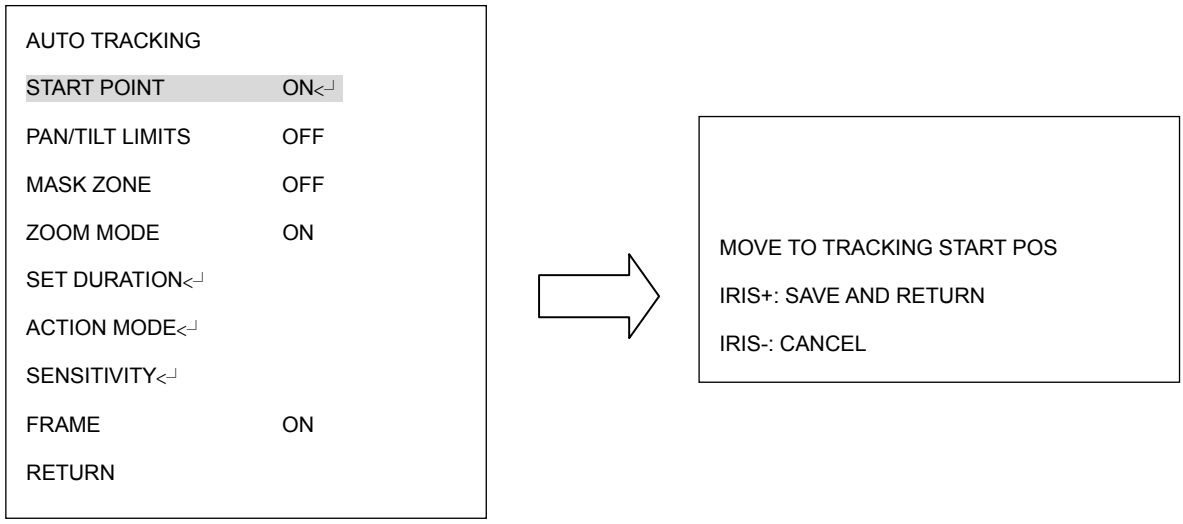
User can also use preset keys to operate auto tracking related functions. Please refer to ”5.2 Auto Tracking Mode”.



(diagram 3.16)

a. START POINT

ON: Turn joystick Left/Right to switch Start Point on or off. When Start Point is on, press Enter key to enter TRACKING START POS. menu. Turn the joystick to select the position where you wish to set Tracking Start position. Press IRIS+ key of keyboard to save setting and return to previous menu. (see diagram 3.17)

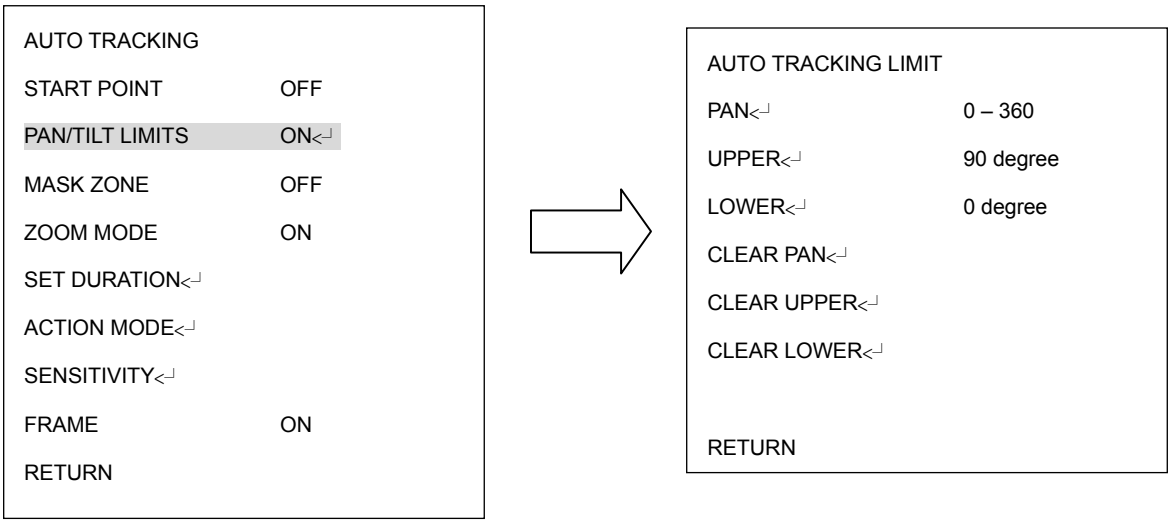


(diagram 3.17)

OFF: disable tracking start position function.

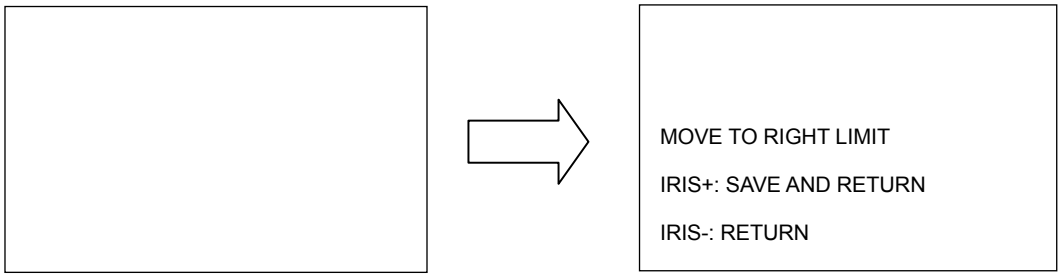
b. PAN/TILT LIMITS

ON: Turn joystick Left/Right to switch Limits on or off. When Limits is on, press Enter key to enter AUTO TRACKING LIMIT menu (see diagram 3.18). Turn the joystick Up/Down to select one of the four following functions and press Enter key to enter its setting menu.



(diagram 3.18)

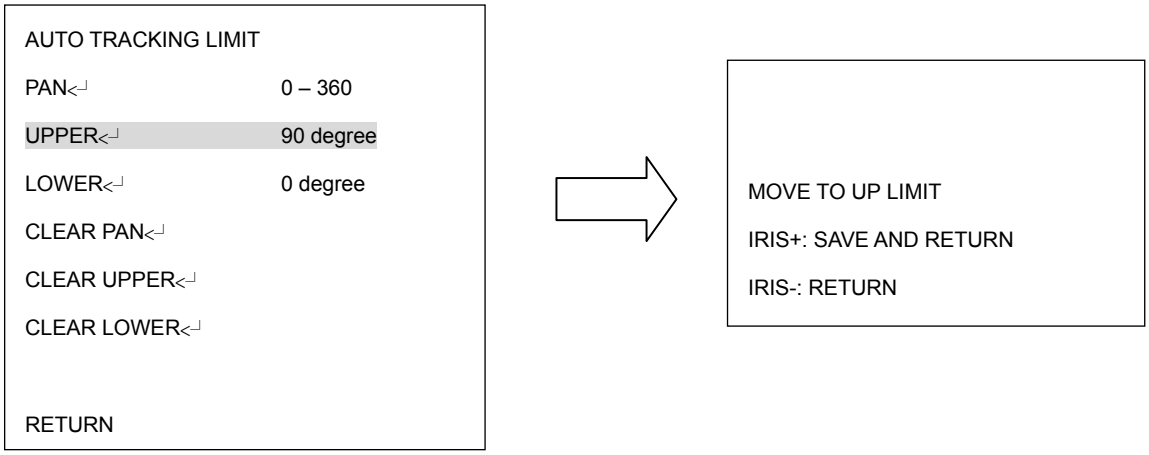
PAN: In MOVE TO LEFT LIMIT window (see left of diagram 3.19), turn the joystick to select the position where you wish to set left limit. Press IRIS+ key of keyboard to enter MOVE TO RIGHT LIMIT window (see right of diagram 3.19). Turn the joystick to select the position where you wish to set right limit. Press IRIS+ key of keyboard to save setting and return to previous menu.



(diagram 3.19)

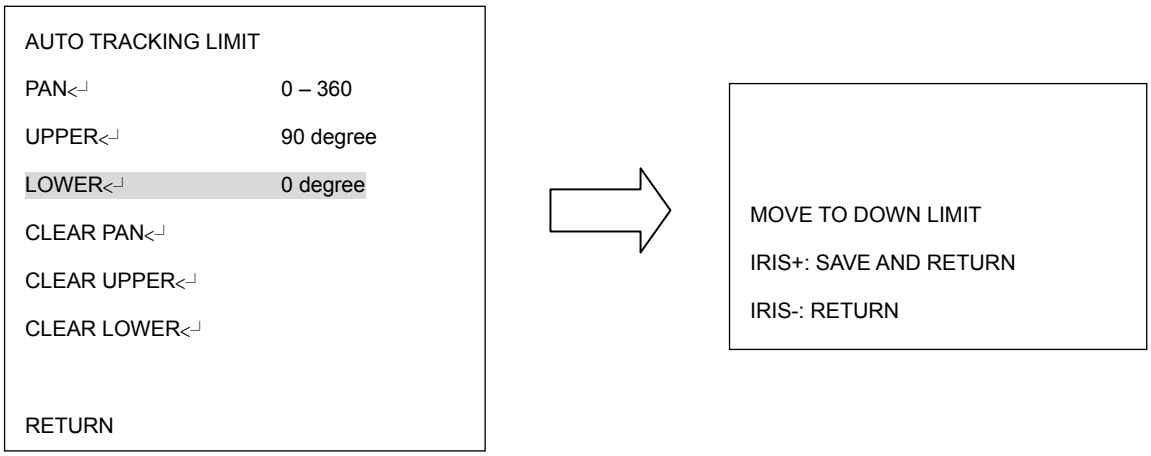
Note: If tracking start point is outside the limits, the screen will show “START POS IS OUTSIDE LIMIT. SET START POS” and user has to reset a start position between left and right limits.

UPPER: In MOVE TO UP LIMIT window (see diagram 3.20), turn the joystick to select the position where you wish to set up limit. Press IRIS+ key of keyboard to save setting and return to previous menu.



(diagram 3.20)

LOWER: In MOVE TO DOWN LIMIT window (see diagram 3.21), turn the joystick to select the position where you wish to set down limit. Press IRIS+ key of keyboard to save setting and return to previous menu.



(diagram 3.21)

Note: If tracking start point is outside the limits, the screen will show “START POS IS OUTSIDE LIMIT. SET START POS” and user has to reset a start position between left and right limits.

CLEAR PAN: select this option and press Enter key to clear pan setting.

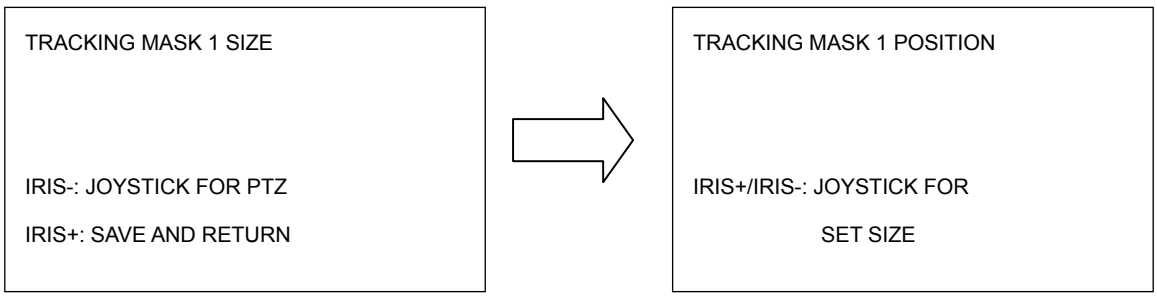
CLEAR UPPER: select this option and press Enter key to clear upper limit setting.

CLEAR LOWER: select this option and press Enter key to clear lower limit setting.

RETURN: select this option and press Enter key to save setting and return to previous menu.

c. MASK ZONE

ON: press Enter key to enter TRACKING MASK menu. Turn the joystick Up/Down to select a mask number. Turn the joystick Left/Right to select “SET” and press Enter key to enter its Tracking Mask Size window (see diagram 3.21). Turn the joystick to change mask to desired size: turn up/right to increase the length/width and turn down/left to decrease the length/width. Press IRIS- key of keyboard to enter Tracking Mask Position window (see right of diagram 3.22). Turn the joystick to select the position where you wish to set mask position. Press IRIS+/ IRIS- key of keyboard to save setting and return to previous tracking mask size window. Press IRIS+ key to save setting and return to previous menu.



(diagram 3.22)

When a mask setting is completed, you will see “GO” displayed behind the mask number. For example: MASK1 GO↵. User can turn the joystick Left/Right to change the status of preset mask, including Go, Clear and Set.

Examples:

MASK1 GO↵ : press Enter key to go to this preset mask position.

MASK1 CLEAR↵ : press Enter key to clear this preset mask.

MASK1 SET↵ : press Enter key to start setting this mask.

OFF: disable tracking mask function.

d. ZOOM MODE: While tracking an object, the system will zoom in to a suitable ratio for closer view.

e. SET DURATION

Press Enter key to enter SET DURATION menu.

DURATION(S): Set tracking duration time in seconds.

Lost Mode: User can set tracking mode when the object is lost on screen. Three available options are:

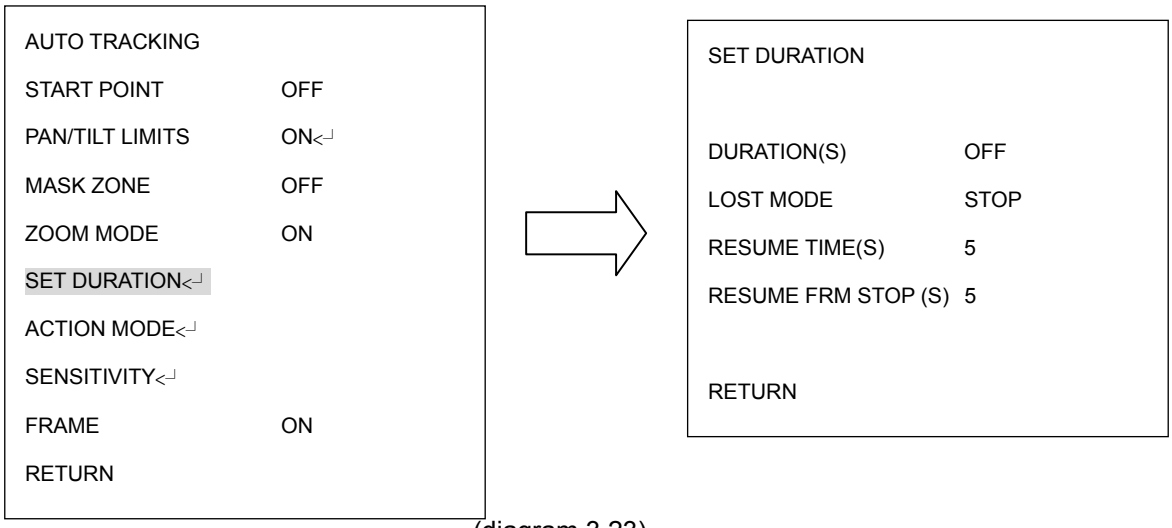
-Zoom: when tracking object is lost, the system will zoom out immediately and looking for a new tracking object

-Stop: when tracking object is lost, the system will stop tracking and zoom out.

-Keep: when tracking object is lost, the system will keep waiting another tracking object at the same position without changing zoom ratio

Resume Time: User can set desired duration for above three options.

RESUME FRM STOP (S): User may manually operate PTZ function of this camera when auto tracking function is on. When manual operation ceases, the system will resume to “auto tracking start point” after this time.



(diagram 3.23)

f. ACTIONS MODE

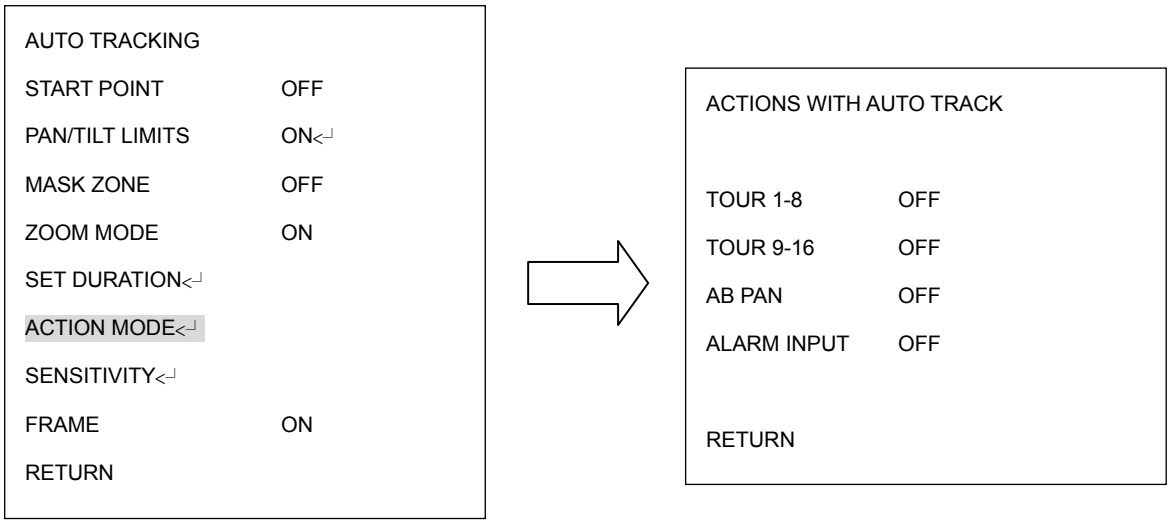
Press Enter key to enter ACTION MODE menu.

TOUR 1-8: Track an object while running tour 1-8.

TOUR 9-16: Track an object while running tour 9-16.

AB PAN: Track an object at poison A/B while running AB PAN

ALARM INPUT: If this option is ON, when the alarm is triggered, PTZ start tracking the position or tour depending on the reaction set in “Alarm Inputs”.



(diagram 3.24)

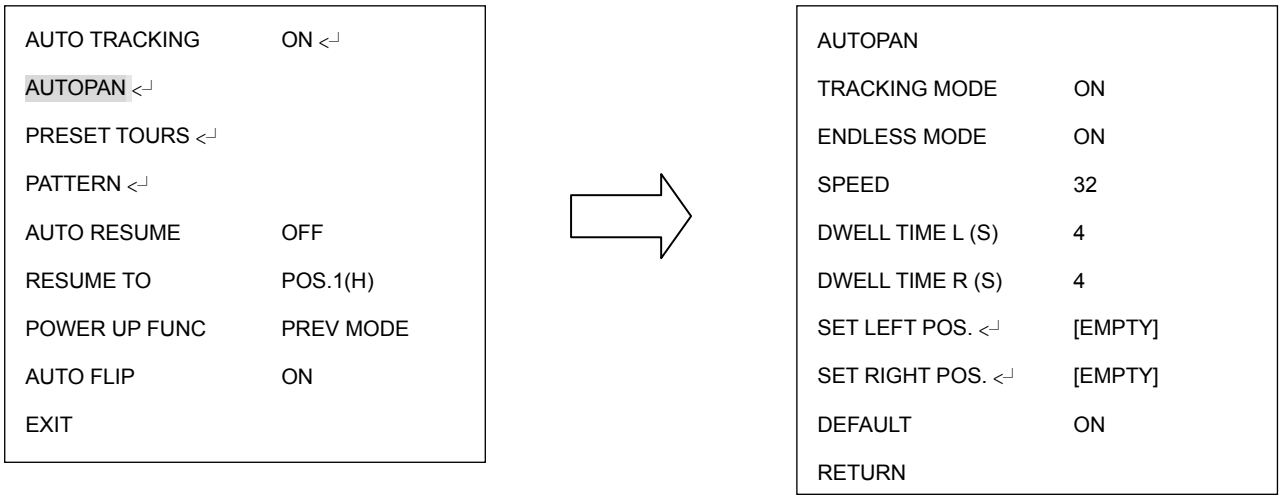
g. SENSITIVITY: User can set sensitivity level of auto-tracking. Available options are low, middle and high.

h. FRAME: User can set frame of tracking object visible by selecting this option ON.

RETURN: select this option and press Enter key to save setting and return to previous menu.

3.5.2. AUTOPAN

Press Enter key of keyboard or turn joystick Left/Right to enter AUTOPAN sub-menu (see diagram 3.25)



(diagram 3.25)

a. TRACKING MODE: (For Auto Tracking Models Only)

Auto tracking can be set on when Auto-Pan function is working. Turn joystick Left/Right to select tracking mode on/off. The system will go back to Auto-Pan mode when tracking is not working.

b. ENDLESS MODE

ON: enable endless mode. The speed dome will perform 360 degree endless auto-pan.

OFF: disable endless mode. The speed dome will perform auto-pan between position left and position right.

c. SPEED

Select speed from 1~255 and 255 is the highest speed.

d. DWELL TIME L (S)

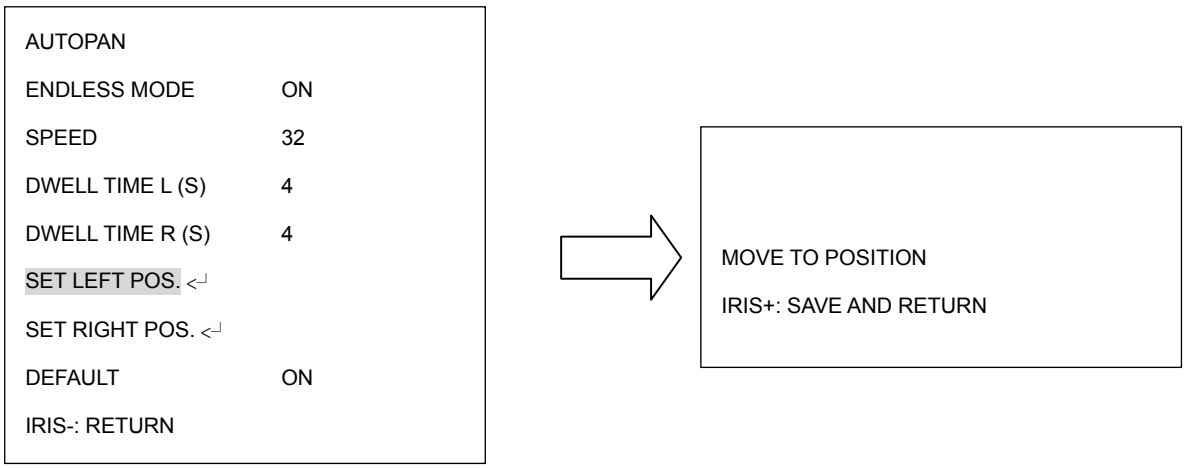
Select dwell time of the left position from 1~99 seconds.

e. DWELL TIME R (S)

Select dwell time of the right position from 1~99 seconds

f. SET LEFT POS.

Press Enter key or turn the joystick Left/Right to enter SET LEFT POS. menu. Turn the joystick to the position where you wish to set Left position. Press IRIS+ key of keyboard to save setting and return to previous menu. (see diagram 3.26)

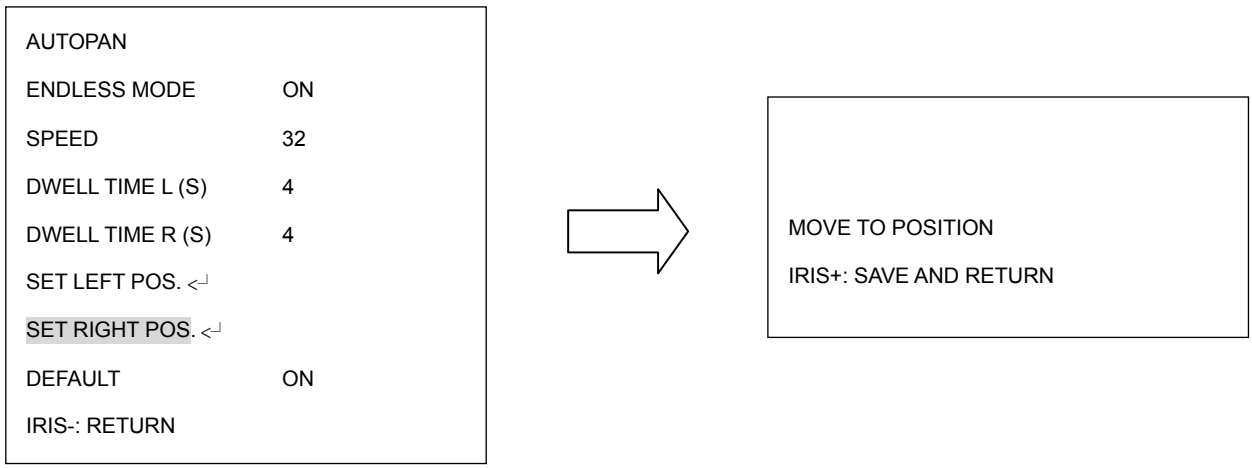


(diagram 3.26)

g. SET RIGHT POS.

Press Enter key or turn the joystick Left/Right to enter SET RIGHT POS. menu. Turn the joystick to the position where you wish to set RIGHT position. Press IRIS+ key of keyboard to save setting and return to previous menu. (see diagram 3.27)

Note: When Left/Right Position are set, the speed dome will patrol between each position.



(diagram 3.27)

h. DEFAULT

ON: all settings in AUTOPAN menu will be returned to default values.

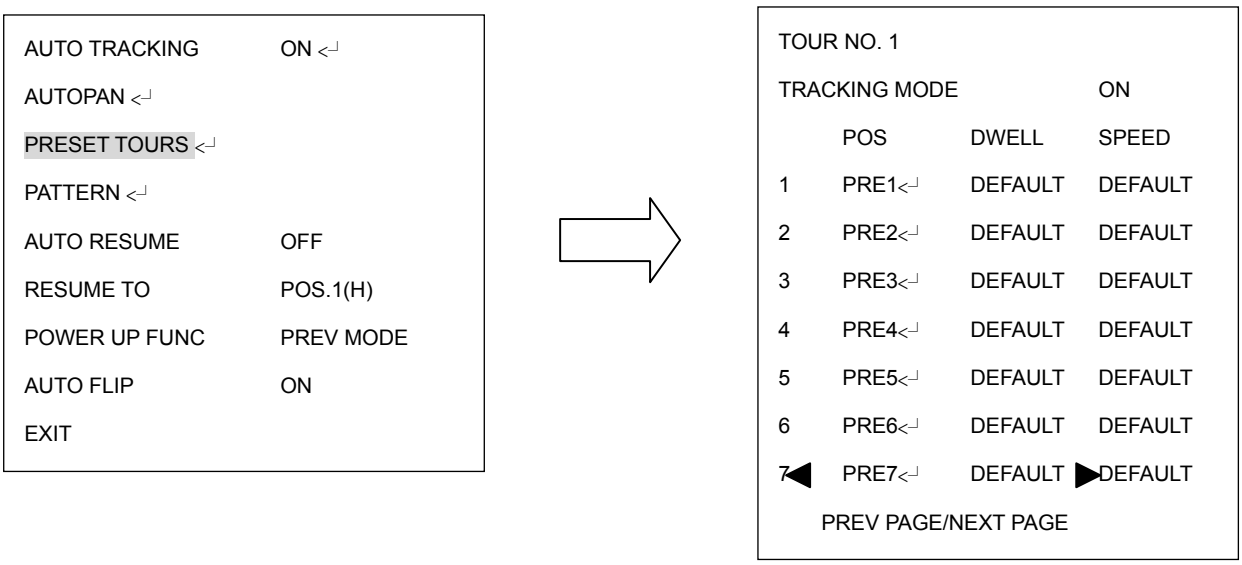
OFF: the setting in AUTOPAN menu is not default value.

i. RETURN

Turn joystick Left/Right to return to previous menu

3.5.3. PRESET TOURS

Press Enter key or turn the joystick Left/Right to enter PRESET TOURS sub-menu (see diagram 3.28)



(diagram 3.28)

a. TRACKING MODE (For Auto Tracking Models Only): Auto tracking can be set on when tour function is working. Turn joystick Left/Right to select tracking mode on/off. The system will go back to tour mode when tracking is not working.

b. Tour NO.: Turn the joystick Left/Right to select tour number first

c. POS: Turn the joystick Left/Right to select preset position. Press Enter key of keyboard to go next setting. Max. 16 positions can be set for a tour.

d. DWELL: Turn the joystick Up/Down to set dwell time of the tour from 1~99 sec or

default.

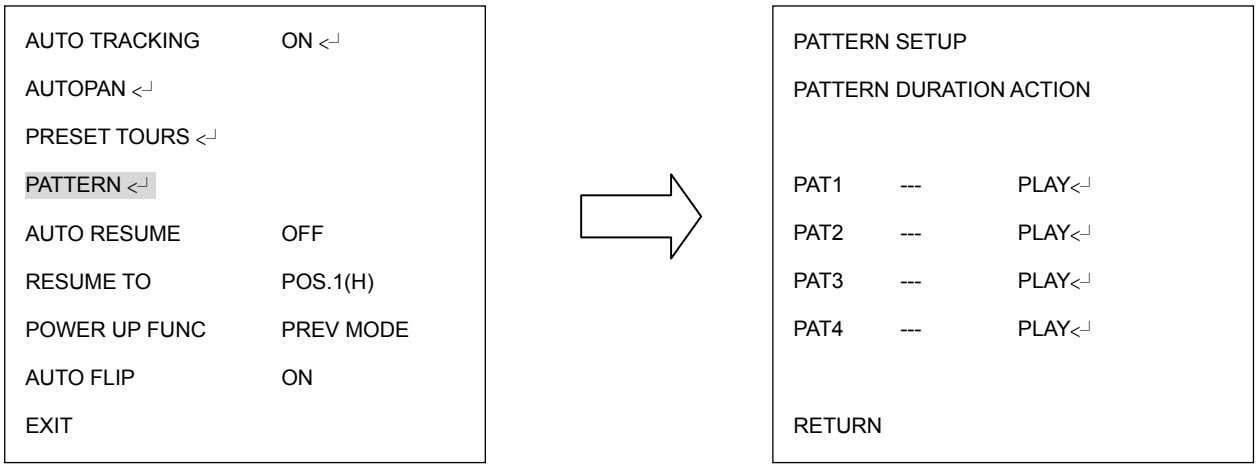
e. SPEED: Turn the joystick Right after setting dwell time. Turn the joystick Up or Down to select tour speed from 1 ~255 or default. Press Enter key when you finish Tour setting of preset position.

f. PREV PAGE/NEXT PAGE: Turn the joystick Left to go previous page or turn joystick Right to go next page.

g. RETURN: Turn joystick Left/Right to return to previous menu.

3.5.4. PATTERN

Press Enter key of keyboard to enter PATTERN sub-menu (see diagram 3.29)

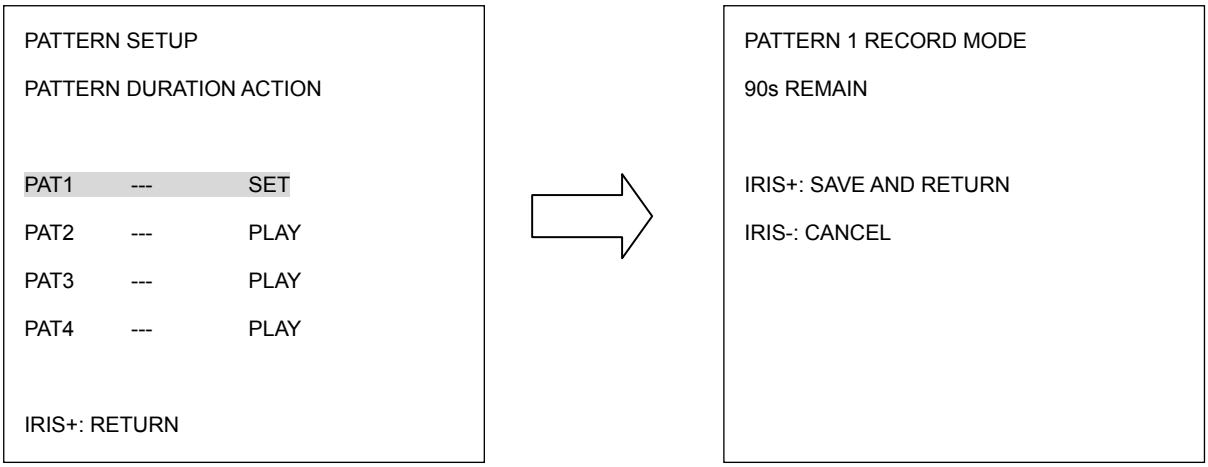


(diagram 3.29)

a. Turn the joystick Up or Down to select pattern number.

b. Turn the joystick Left or Right to select action mode, either **PLAY, SET** or **CLEAR**.

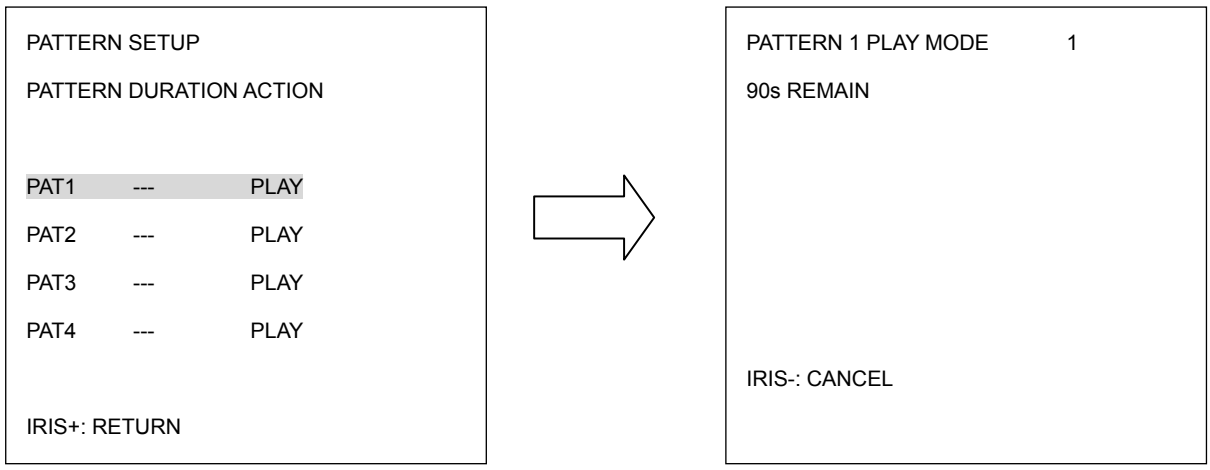
c. Select **SET** and press Enter key of keyboard.



(diagram 3.30)

d. Turn the joystick to record the tour you wish to set. Press IRIS+ when you finish setting pattern tour. Press IRIS- if you wish to cancel this action. At duration column of PATTERN SETUP menu, you will see the duration time of pattern you set.

e. When you return to PATTERN SETUP menu, turn the joystick Left/Right to **PLAY**. Press Enter key of keyboard. The camera starts to run the pattern tour you set. The camera keeps playing the pattern until you press IRIS- to cancel playing and it will return to PATTERN SETUP menu.



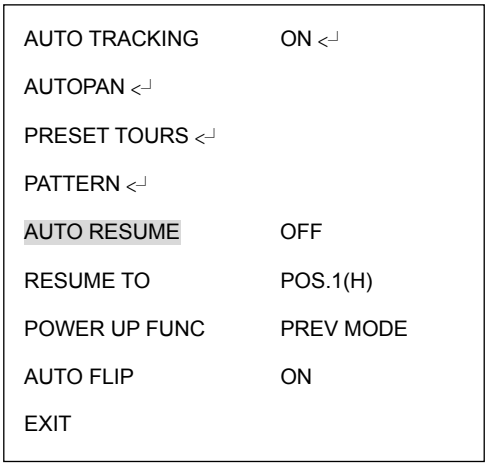
(diagram 3.31)

f. RETURN: Turn joystick Left/Right to return to previous menu.

3.5.5. AUTO RESUME

Return to previous mode, if no action for a period.

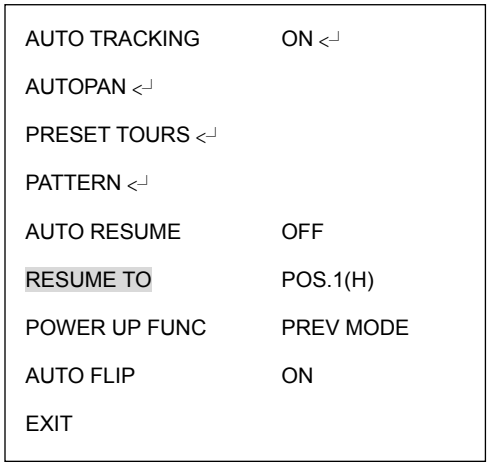
Turn the joystick Left/Right to set AUTO RESUME. Auto Resume is selectable from OFF, After 30 sec, After 1 min, after 5 min, After 10 min, After 30 min and After 60 min. After this period of time, speed dome will resume to the mode you set in “RESUME TO”. By selecting OFF, this function will be disabled. (see diagram 3.32)



(diagram 3.32)

3.5.6. RESUME TO

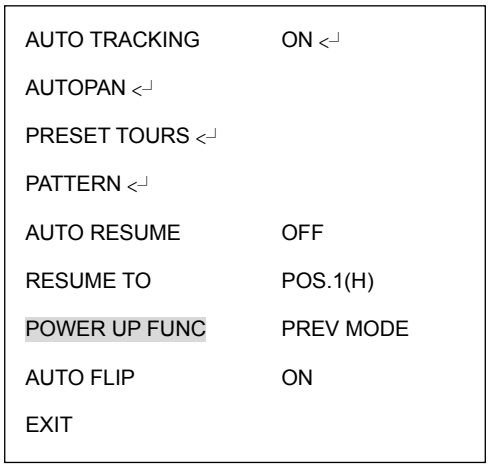
Turn the joystick Left/Right to select the mode to resume to. It is selectable from PREV MODE, POS.1 (H), TOUR1, PAT.1 and AUTOPAN. (see diagram 3.33)



(diagram 3.33)

3.5.7. POWER UP FUNC

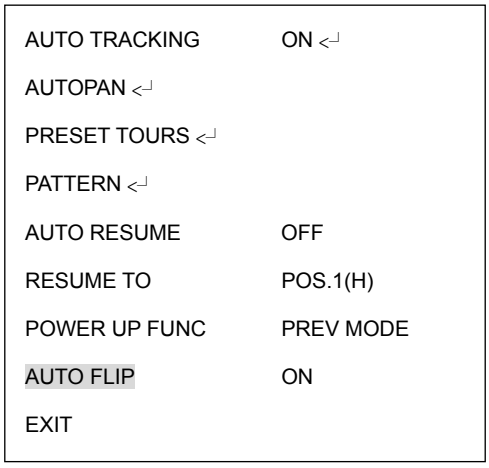
Turn the joystick Left or Right to select the mode to return to when power failure occurs. It is selectable from PREV MODE, POS.1 (H), TOUR1, PAT.1, AUTOPAN and OFF. (see diagram 3.34)



(diagram 3.34)

3.5.8. AUTO FLIP

Select ON to enable Auto Flip function or select OFF to disable Auto Flip. (see diagram 3.35)



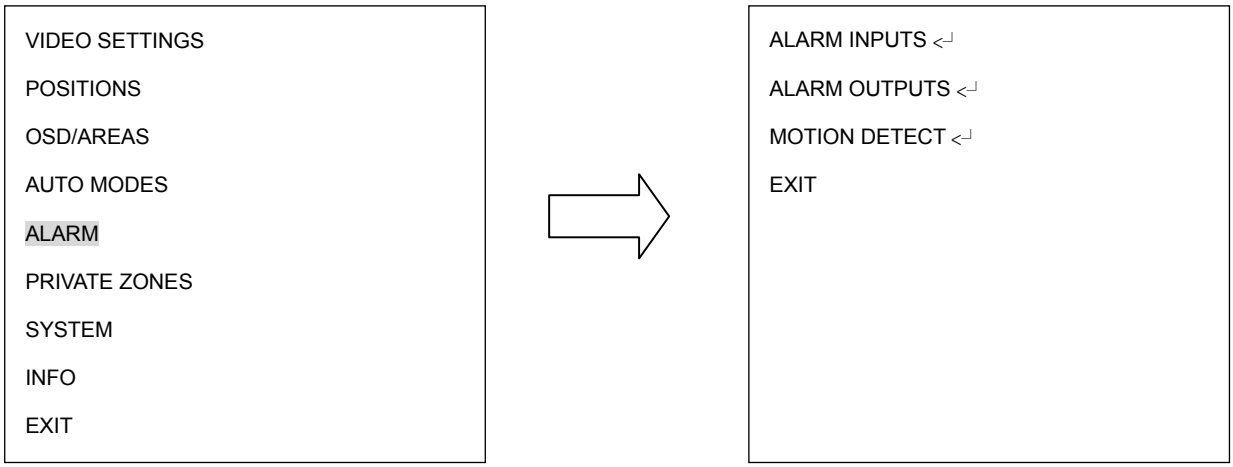
(diagram 3.35)

3.5.9. EXIT

Exit from the current menu.

3.6. ALARM

In main menu, turn joystick Up or Down to select ALARM. Turn joystick Left or Right to enter ALARM sub-menu (see diagram 3.36)



(diagram 3.36)

3.6.1. ALARM INPUTS

Press Enter key of keyboard to enter ALARM INPUTS sub-menu. (see diagram 3.37)

a. Go to INPUT NO. selection and turn the joystick Left/Right to select alarm input number from 1 ~4.

b. Type: Select Normal Close (NC), Normal Open (NO), NIGHT NC, NIGHT NO, or OFF for alarm type.

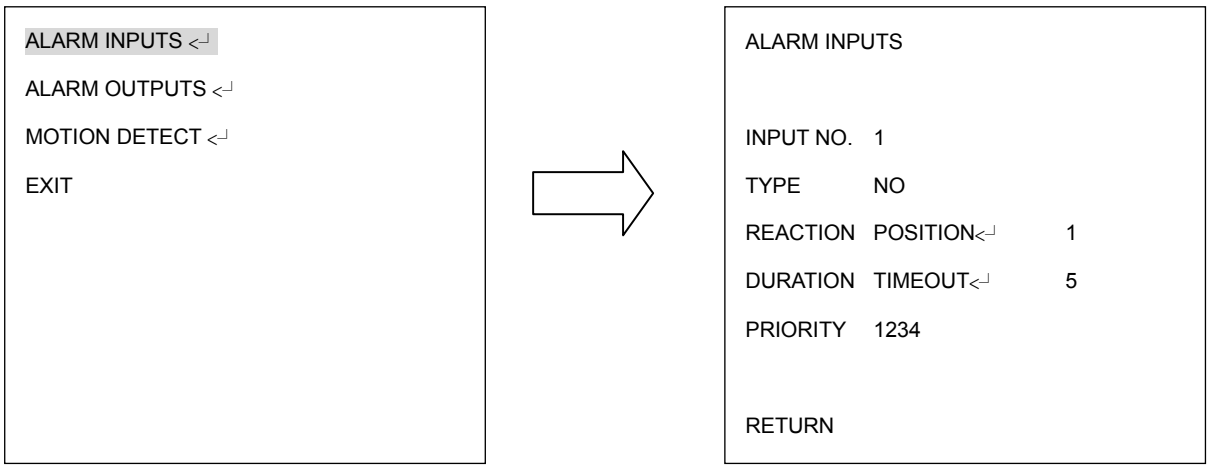
NC: Enable a normal close alarm input.

NO: Enable a normal open alarm input.

NIGHT NC: Set camera at night mode with normal close alarm input. When there is event triggered, the camera will be changed to day mode.

NIGHT NO: Set camera at night mode with normal open alarm input. When there is event triggered, the camera will be changed to day mode.

OFF: Disable alarm input.



(diagram 3.37)

c. REACTION: The action will be taken when alarm is triggered.

OFF: No reaction will be taken when alarm is triggered.

POSITION: When the alarm is triggered, speed dome will go to the preset position. Turn the joystick Left or Right to select on Position and press Enter key to select position number. Turn joystick Left/Right to make selection. It is selectable from 1~192. Press Enter key again to confirm selection.

PATTERN: When the alarm is triggered, speed dome will run the pattern. Turn the joystick Left/Right to select on Pattern and press Enter key to select pattern number. Turn joystick Left/Right to make selection. It is selectable from1~4. Press Enter key again to confirm selection.

TOUR: When the alarm is triggered, speed dome will run the tour. Turn the joystick Left or Right to select on Tour and press Enter key to select tour number. Turn joystick Left or Right to make selection. It is selectable from1~16. Press Enter key again to confirm selection.

d. DURATION: Duration of alarm input.

TIMEOUT: Turn the joystick Left or Right to select on TIMEOUT and press Enter key to select time-out. Time-out is selectable from 1~99. Press Enter key again to confirm selection.

LATCHED: Turn the joystick Left or Right to select on LATCHED. The alarm output will not stop until there is any operation on keyboard.

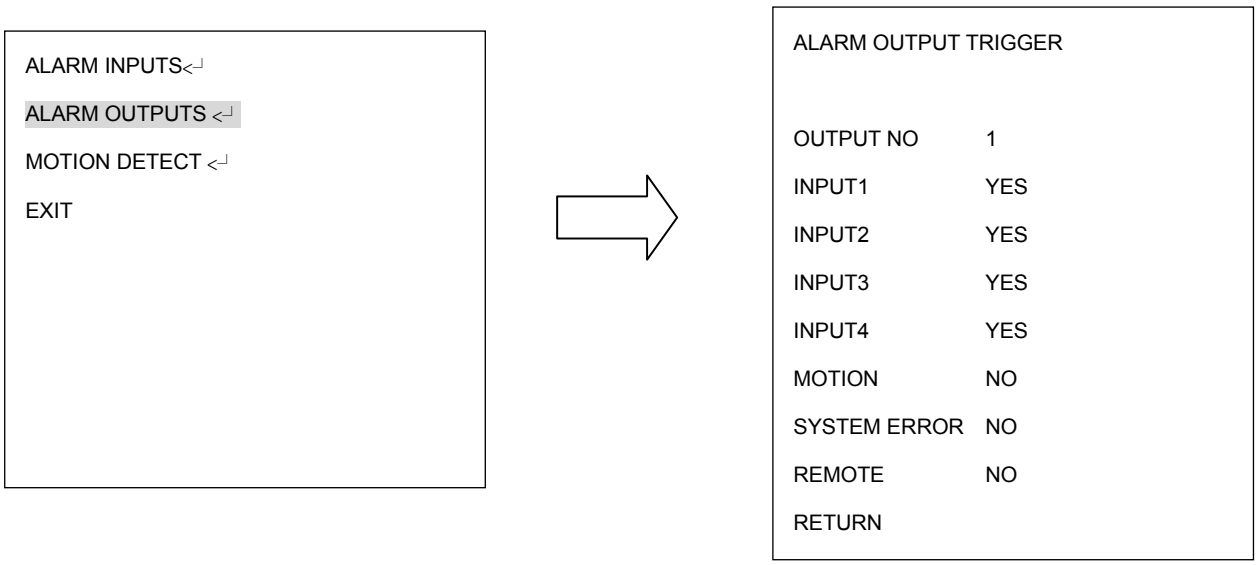
TRANSPARENT: Turn the joystick Left or Right to select on TRANSPARENT. The alarm output will not stop until the alarm is stopped.

e. PRIORITY: Turn the joystick Left or Right to select alarm input priority, it is selectable from 1234/2341/3412/4123.

f. RETURN: Turn joystick Left/Right to return to previous menu.

3.6.2. ALARM OUTPUTS

Press Enter key of keyboard to enter ALARM OUTPUTS sub-menu. (see diagram 3.38)



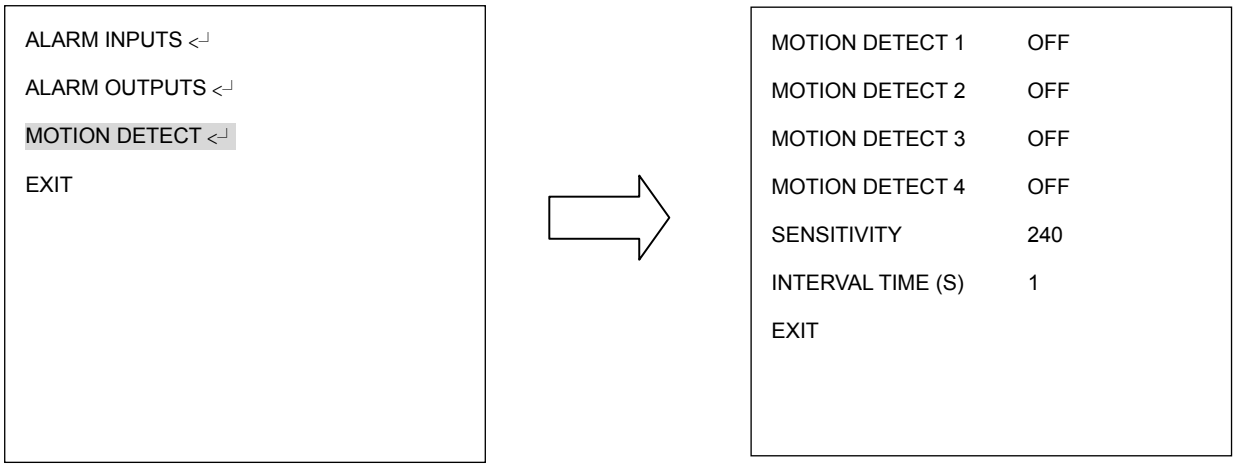
(diagram 3.38)

a. OUTPUT NUM: Select Output number from 1~2.
b. INPUT1: Select YES to enable Alarm input 1 for the alarm output selected. Select NO to disable Alarm input 1.
c. INPUT2: Select YES to enable Alarm input 2 for the alarm output selected. Select NO to disable Alarm input 2.
d. INPUT3: Select YES to enable Alarm input 3 for the alarm output selected. Select NO to disable Alarm input 3.
e. INPUT4: Select YES to enable Alarm input 4 for the alarm output selected. Select NO to disable Alarm input 4.
f. MOTION: Select YES to have alarm output triggered when a motion event is detected. Select NO to disable this function.
g. SYSTEM ERROR: Select YES to have alarm output triggered when system error occurs. Select NO to disable this function.
h. REMOTE: Select YES to have alarm output triggered when RS485 failure occurs. Select NO to disable this function.
i. RETURN: RETURN to the previous menu.

3.6.3. MOTION DETECT

Press Enter key of keyboard to enter MOTION DETECT sub-menu. (see diagram 3.39)

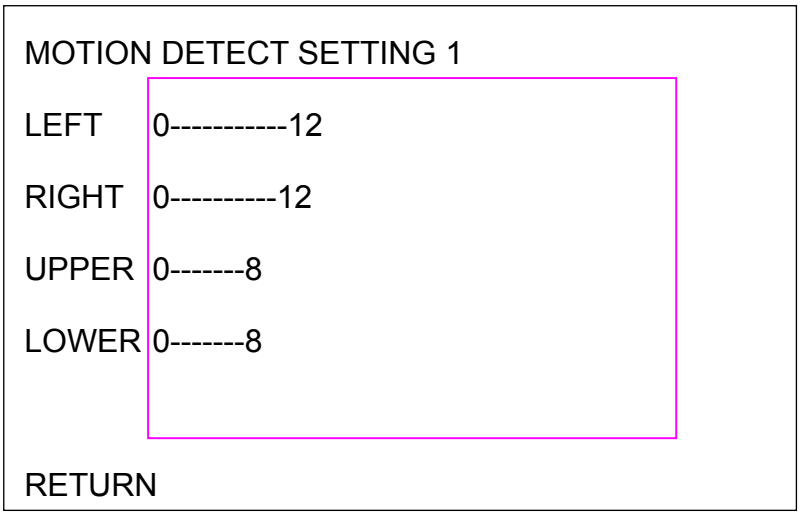
You can set 4 motion areas.



(diagram 3.39)

a. Turn the joystick Left or Right to select ON for motion detection. A window as below pops up.

b. Press Enter key to enter Motion Detection Setting. Use the joystick to select motion area. Turn the joystick Up or Down to select directions, LEFT, RIGHT, UPPER or LOWER. Turn the joystick Left or Right to adjust the value of motion area. For Left & Right directions, it is selectable from 0 to 12. For Upper & Lower directions, it is selectable from 0 to 8. There is a color frame showing you the motion detection area you change. Motion 1 is represented by pink, Motion 2 by blue, Motion 3 by green and Motion 4 by yellow. Press IRIS+ key to save setting and return to previous menu. Press IRIS- to return to previous menu.



(diagram 3.40)

c. SENSITIVITY: select motion detection sensitivity level from 1~255.

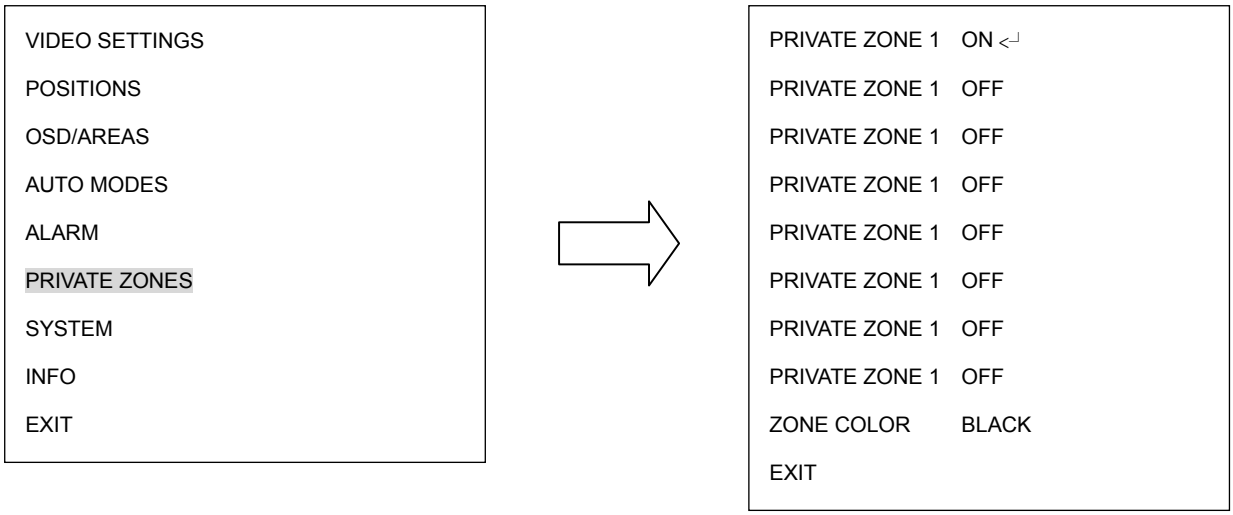
d. INTERVAL TIME (S): select interval time in seconds from 1~255. Speed dome will stop detecting motion during this interval time.

3.6.4. EXIT

Exit from the current menu.

3.7. PRIVATE ZONES

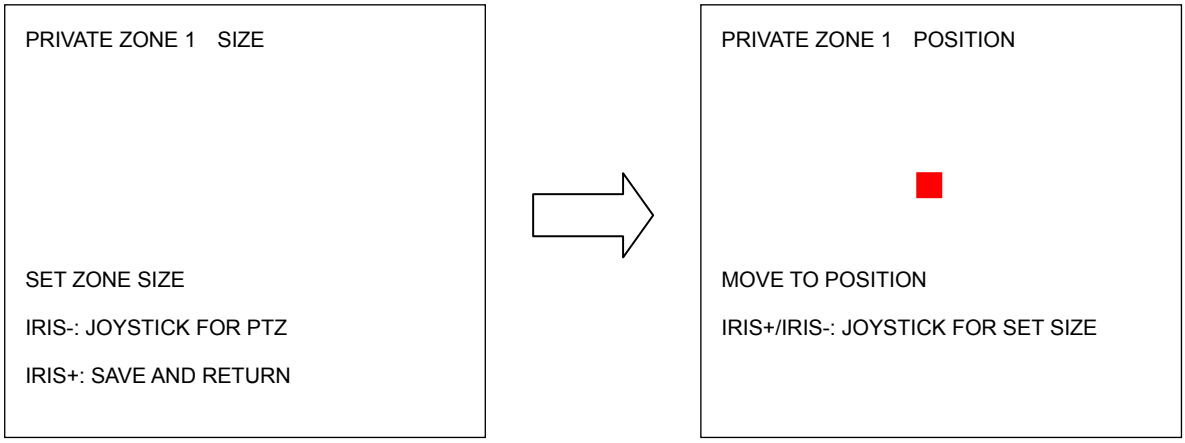
In main menu, turn joystick Up/Down to select PRIVATE ZONES masking. Turn joystick Left/Right to enter PRIVATE ZONE sub-menu (see diagram 3.41)



(diagram 3.41)

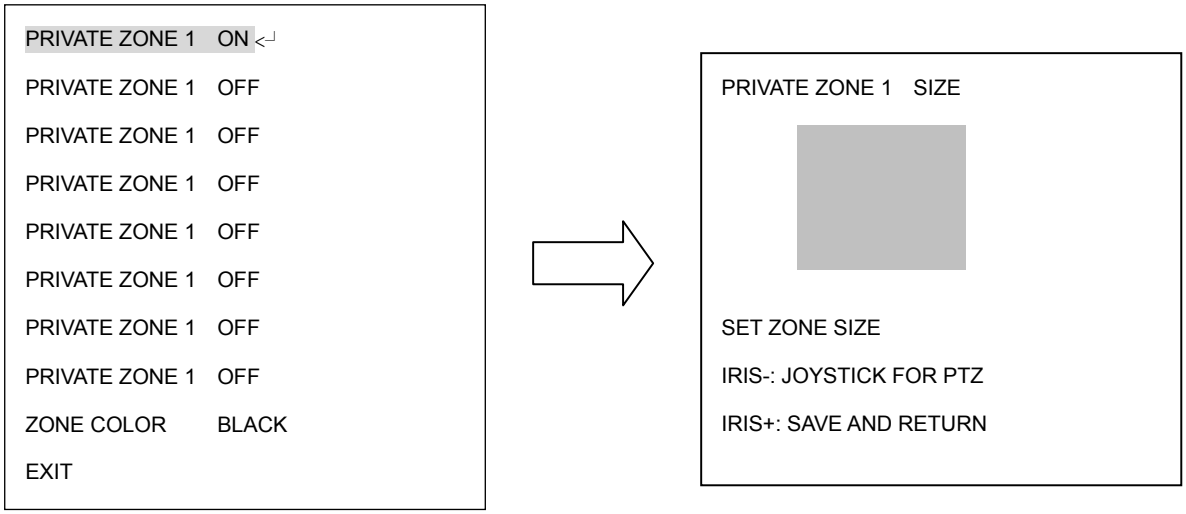
a. ON: Turn joystick Left/Right to select ON/OFF. For private zone ON, press Enter key to enter private zone position.

b. Turn the joystick and move to position of private zone. Press IRIS+ or IRIS- key to set private zone size.



(diagram 3.42)

c. Select the area to be covered first. Turn joystick Left/Right to adjust width of the private zone area. Turn joystick Up or Down to adjust height of the private zone area. Press IRIS- key to set private zone position. Press IRIS+ to save and return to previous menu.



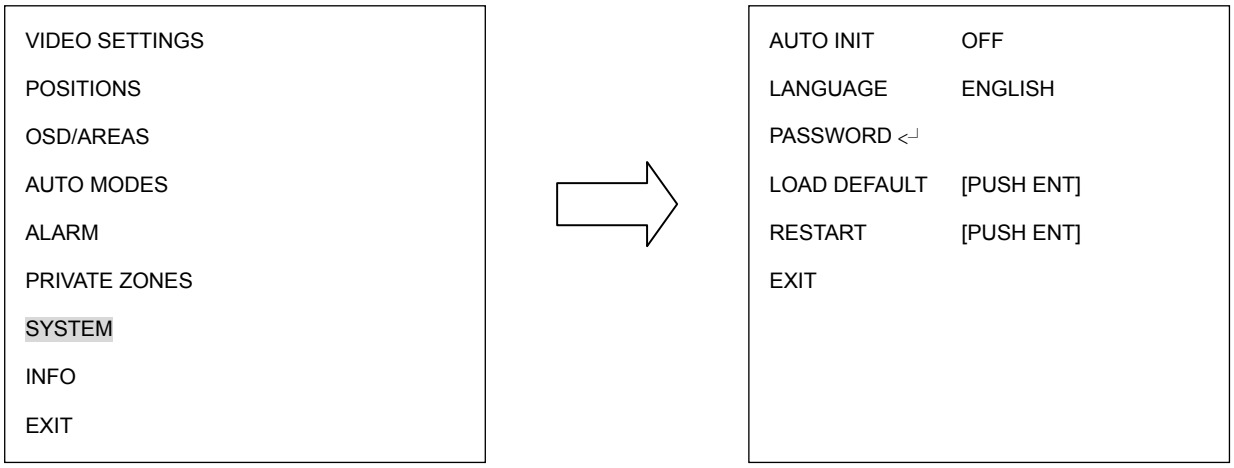
(diagram 3.43)

d. Zone color: select private zone area color.

e. Exit: exit from current menu.

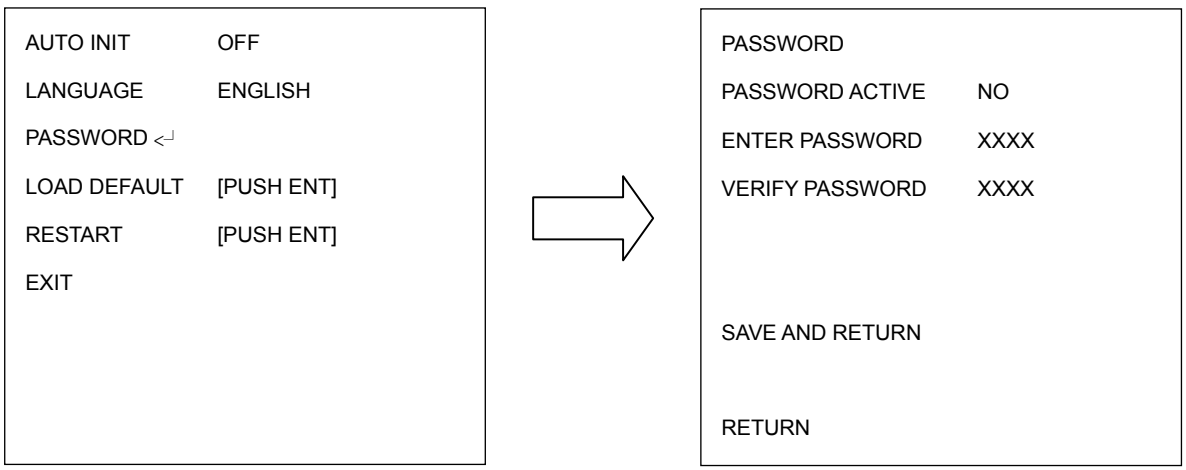
3.8. SYSTEM

In main menu, turn joystick Up/Down to select SYSTEM. Turn joystick Left/Right to enter SYSTEM sub-menu (see diagram 3.44)



(diagram 3.44)

a. AUTO INIT: Select auto initiation time from OFF, DAILY, WEEKLY. Speed dome will automatically initiate and return to the previous position by maintaining all the settings you have done.
b. LANGUAGE: Select language. The current version only supports English version.
c. PASSWORD: Press Enter key or turn joystick Left/Right to enter password sub-menu.



(diagram 3.45)

-PASSWORD ACTIVE: Select YES to activate password mode. Select NO to disable password mode.

-ENTER PASSWORD: Enter the password

-VERIFY PASSWORD: Enter the password again to confirm your input.

Press IRIS+ key to save and return to previous menu. Press IRIS- key to cancel.

-SAVE AND RETURN: Turn joystick Left/Right to save the changes and return to previous menu.

-RETURN: Turn joystick Left/Right to return to previous menu without saving changes.

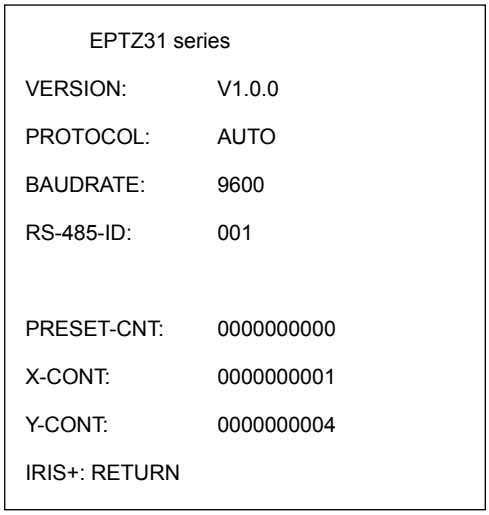
d. LOAD DEFAULT: Press Enter key to load default values, all values will return to factory default value.

e. Restart: Press Enter key to restart the speed dome.

f. EXIT: Exit from current menu.

3.9. INFO

In main menu, turn joystick Up or Down to select INFO. Turn joystick Left or Right to enter INFO sub-menu (see diagram 3.46)



(diagram 3.46)

a. VERSION: shows firmware version of this speed dome

b. PROTOCOL: shows protocol of this speed dome

c. BAUDRATE: shows baud rate of this speed dome

d. RS-485-ID: shows RS-485 ID of this speed dome

e. PRESET-CNT: Preset counter. This counter counts the preset movement, and 1 is counted when the speed dome runs to preset position.

f. X-CONT: X-axis counter. This counter counts the x axis movement, and 1 is counted when the speed dome pans 360°.

g. Y-CONT: Y-axis counter. This counter counts the y axis movement, and 1 is counted when the speed dome tilts 180°.

h. Press IRIS+ key to return to previous menu.

3.10. EXIT

Exit from the current menu.

4. EPTZ3100 SERIES CAMERA SETUP MENU

This section will show how to navigate and set up the menu of the EPTZ3100/EPTZ3100I.

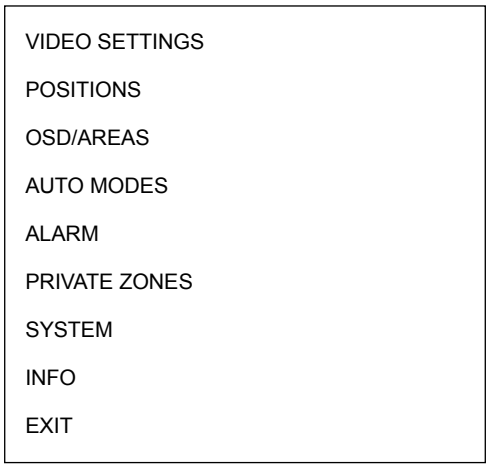
There are 9 items of the setting menu.

NOTE: The controls described in this section are based on using the EKB500 keyboard.

4.1. Structure of the Setup Menu

Press MENU to enter camera setup menu.

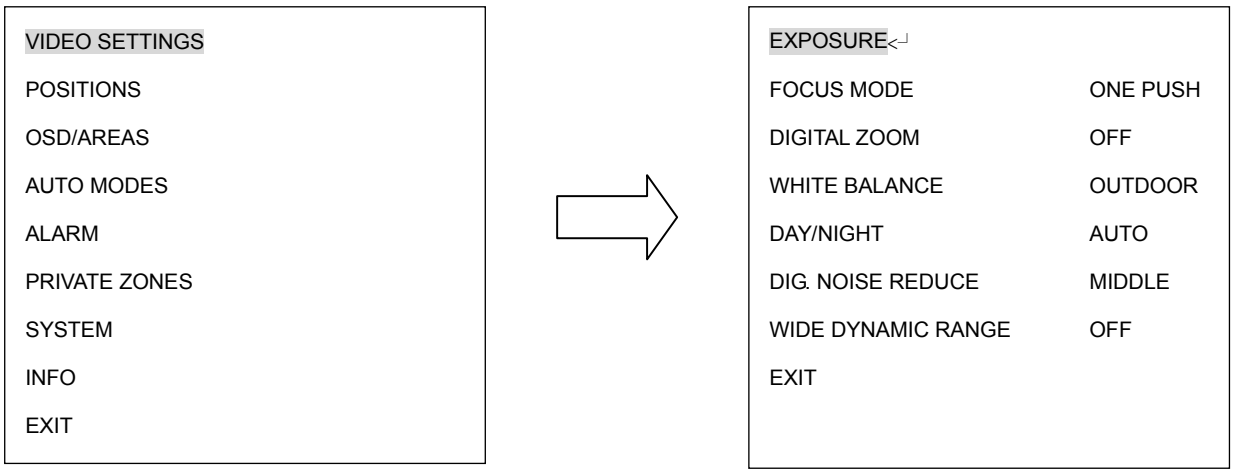
Turn the Joystick up/down to change subentries, and right/left to change the setting. If there is an arrow at the end of selection, it means that selection has a sub-menu, please press Enter key of keyboard to enter sub-menu.



(diagram 4.1)

4.2. VIDEO SETTINGS

In main menu, turn joystick Up / Down to select VIDEO SETTINGS. Turn joystick Left / Right to enter VIDEO SETTINGS sub-menu (see diagram 4.2).

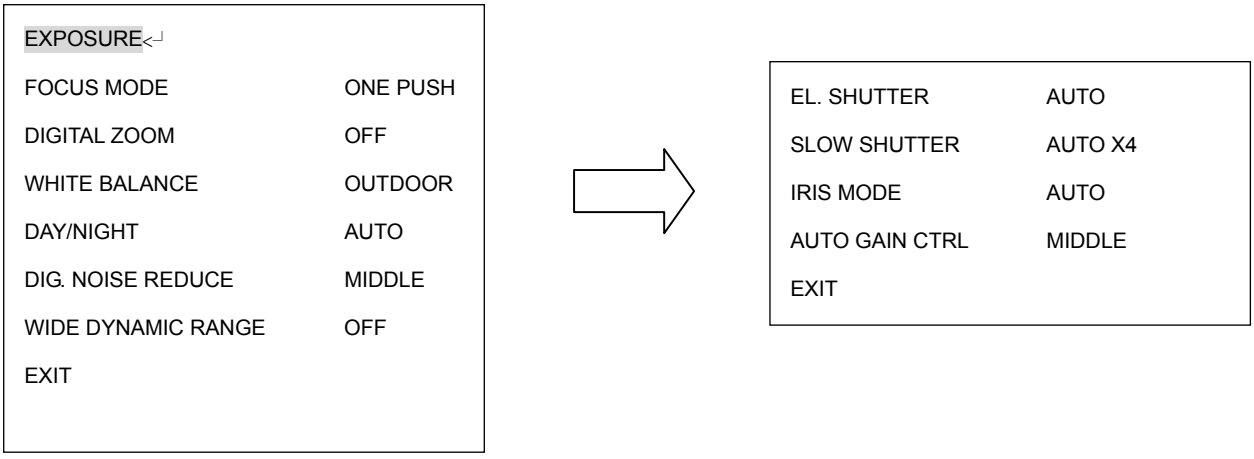


(diagram 4.2)

4.2.1. EXPOSURE

In Exposure menu, there is a sub-menu. Press Enter key or turn joystick Left / Right to enter Exposure sub-menu.

There are 4 options in Exposure: EL. SHUTTER, SLOW SHUTTER, IRIS MODE, and AUTO GAIN CTRL.



(diagram 4.3)

EL.SHUTTER: Select electronic shutter mode from the options of the menu. There are AUTO, A.FLK , 1/50, 1/160 , 1/250 , 1/1000 , 1/2500, 1/10000, 1/120,000, X2, X4, X6 and X8.

AUTO: The AUTO electronic shutter mode is enabled. The shutter speed is controlled automatically according to the brightness of the screen

A.FLK: Anti-Flicker. Camera will auto adjust the shutter to reduce the flicker caused by fluorescent light.

1/60 (NTSC) and 1/50 (PAL): default auto shutter.

1/160: 1/160 sec shutter for NTSC and PAL

1/250: 1/250 sec shutter for NTSC and PAL

1/1000: 1/1000 sec shutter for NTSC and PAL

1/2500: 1/2500 sec shutter for NTSC and PAL

1/10000: 1/10000 sec shutter for NTSC and PAL

1/120000: 1/120000 sec shutter for NTSC and PAL

X2: Two times of the standard shutter. The standard shutter is 1/60 sec for NTSC and 1/50 sec for PAL

X4: Four times of the standard shutter.

X6: Six times of the standard shutter.

X8: Eight times of the standard shutter.

SLOW SHUTTER: Slow electronic shutter. In order to enhance the view in the low lux environment, slow shutter allows more light go through the shutter. Select from OFF, AUTO X4, AUTO X8, AUTO X12, AUTO X16, AUTO X32, AUTO X64, and AUTO X128.

OFF: Disable Slow Shutter function.

AUTO X4: The slow shutter is automatically adjusted by the camera and limited up to four times of the standard shutter. The standard shutter is 1/60 sec for NTSC and 1/50

sec for PAL.

AUTO X8, AUTO X12, AUTO X16, AUTO X32, AUTO X64, and AUTO X128 work the same as AUTO X4 with different times of shutter speeds.

NOTE: If EL. SHUTTER is selected, SLOW SHUTTER will be disabled.

IRIS MODE: AUTO mode or MANUAL mode can be selected.

MANUAL: The brightness of the image can be adjusted manually.

AUTO: The brightness of the image signal will adjust automatically depending on the amount of light.

AUTO GAIN CTRL (AGC): When the brightness of the image taken under dark light is under a certain level, the AGC functions to define whether to control the Gain automatically or not. Select one mode from OFF, LOW, MIDDLE, HIGH.

EXIT: Select Exit to save settings and exit from current page.

4.2.2. FOCUS MODE

In Focus mode, we define focus type from **ONE PUSH, AUTO** and **Manual**.

ONE PUSH: Enable the one push trigger focus mode. The focus lens holds the same position until the next trigger command is received. This function prevents the wrong focus in dark.

AUTO: Auto focus is enabled. It automatically adjusts the focus position to maximize the high frequency content of the picture in a center measurement area, taking into consideration the high luminance and strong contrast components.

MANUAL: Enable the manual focus mode.

4.2.3. DIGITAL ZOOM

Magnification of the digital zoom can be selected among OFF, 2X, 4X and 8X.

OFF: Disable the digital zoom function.

4.2.4. WHITE BALANCE

The white balance function corrects the abnormal white color into the normal white color under any color temperature lighting. White Balance has the following modes:

OUTDOOR: This mode is an automatic mode. It is recommended to use this mode in an area under a broad color temperature.

INDOOR: This mode is an automatic mode. The camera balances the color automatically depending on the source of the light from 1800 to 10500K. It is recommended to use this mode in an area under the limited color temperature.

ONE PUSH: Enable one push trigger for white balance mode. This holds the white balance at a specific color temperature until the next command trigger is given.

MAN2000K: This mode is a manual mode. The color temperature will be fixed at 2000K.

MAN3200K: This mode is a manual mode. The color temperature will be fixed at 3200K.

MAN5100K: This mode is a manual mode. The color temperature will be fixed at 5100K.

4.2.5. DAY/NIGHT

In Day/Night, we define the ICR (IR Cut-Removable) mode settings. The camera has a

built-in infrared (IR) cut-filter which can be disengaged from the image path for increased sensitivity in low light environments.

Select from **AUTO, DAY** and **NIGHT**

NIGHT: IR cut filter is always removed (ICR ON).

DAY: IR cut filter is always attached (ICR OFF).

AUTO: Auto Day/Night mode switch. The camera will automatically switch the settings needed for attaching or removing the IR cut filter. At a certain level of darkness, the IR cut-filter will be disabled and increase the infrared sensitivity (ICR ON). At a certain level of brightness, the IR cut-filter will reactivate automatically (ICR OFF).

4.2.6. DIG. NOISE REDUCE

DIGITAL NOISE REDUCE (DNR) function reduces background noise under low light conditions differently in different modes.

OFF: No noise reduction effect.

LOW: Noise reduction effect is small but there is little afterimage.

MIDDLE: Noise reduction effect is generally effective in this mode. Noise can be reduced properly and the afterimage is not strong.

HIGH: Noise reduction effect is excellent but afterimage is also strong.

4.2.7. WIDE DYNAMIC RANGE

This function is effective when shooting images against the sun or any other bright light source. When both bright and dark areas exist in an image, WDR allows both areas to be seen clearly. In Wide Dynamic Range, we define wide dynamic range from **LOW**, **MIDDLE**, **HIGH** and **OFF.**

OFF: Disable wide dynamic range.

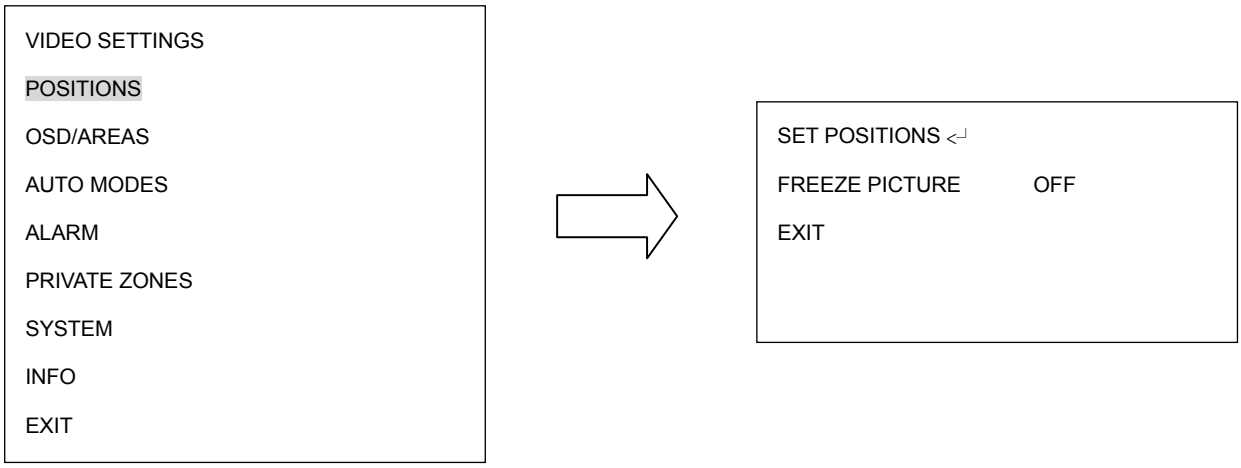
Notice: When the wide dynamic range is ON, some part of the image may appear solarized. This is normal for the wide dynamic range, and is not a camera malfunction.

4.2.8. EXIT

Select Exit to save settings and exit from current page.

4.3. POSITIONS

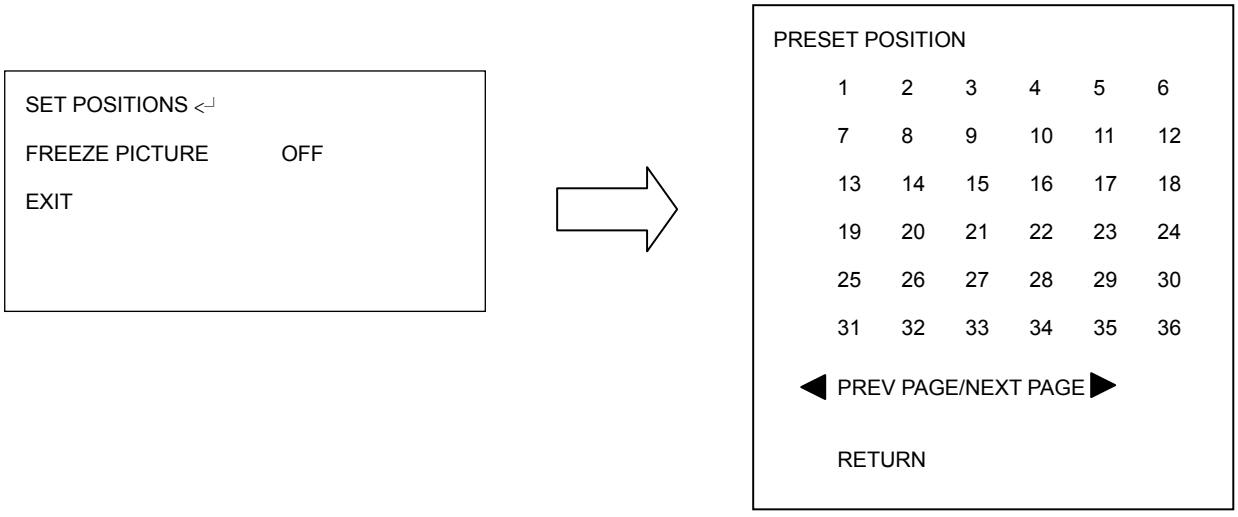
In main menu, turn joystick Up or Down to select POSITION option. Press Enter key or turn joystick Left / Right to enter POSITION sub-menu (see diagram 4.4).



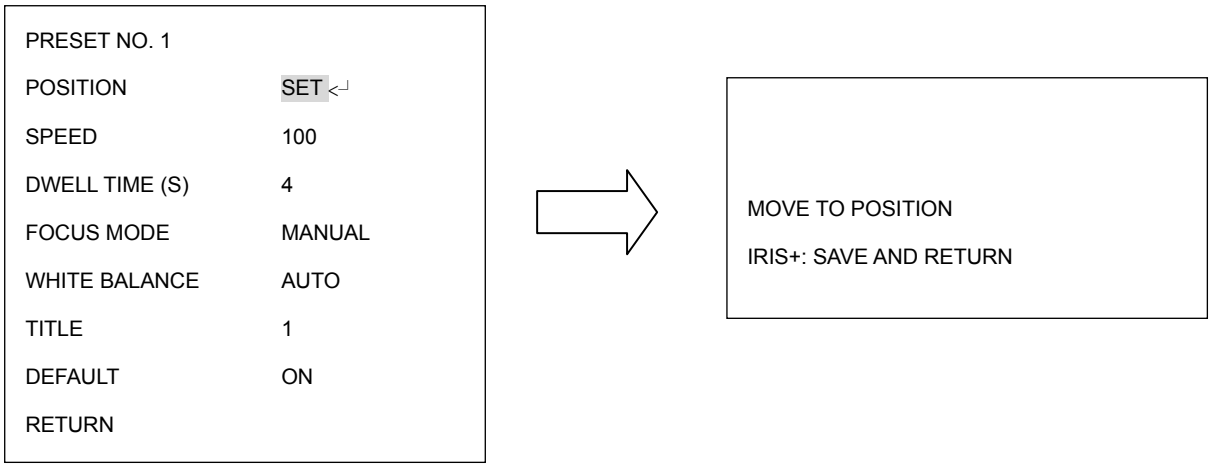
(diagram 4.4)

Press Enter key of keyboard to enter SET POSITIONS sub-menu.

Tilt the joystick left/right to highlight a preset position and press Enter to select it. There are a total of 36 presets per page. Once the position is selected, a star sign (*) will appear next to the number. When finished, go to RETURN and tilt the joystick left/right to go to the Preset options.


SET POSITIONS ↵
FREEZE PICTURE OFF
EXIT
PRESET POSITION
1 2 3 4 5 6
7 8 9 10 11 12
13 14 15 16 17 18
19 20 21 22 23 24
25 26 27 28 29 30
31 32 33 34 35 36
◀ PREV PAGE/NEXT PAGE ▶
RETURN

(diagram 4.5)

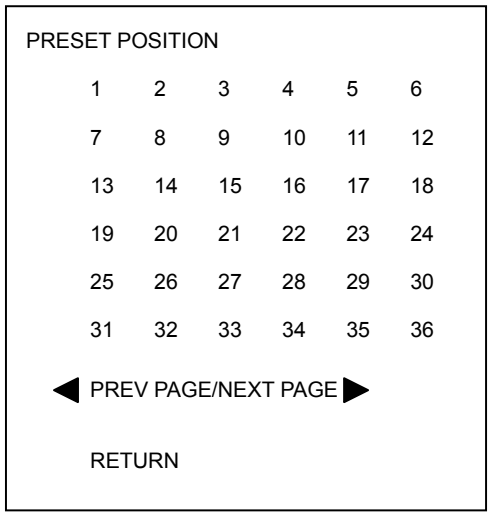


(diagram 4.6)

POSITION: Select from SET and CLEAR.

SET: Select SET and press Enter key of keyboard, you will be entered to a sub-menu. Turn the joystick to your desired position. Once the position is confirmed, press IRIS+ key of keyboard to save setting and return to previous menu. If position is set, there will be a star sign (*) beside position number.

Clear: Select Clear and press Enter key of keyboard, and the POSITION will be cleared. You will automatically go back to the sub-menu of PRESET POSITION. Please see diagram 4.7.



(diagram 4.7)

SPEED: Select the speed for the preset position. The value is from 1 to 255 and 255 is the highest speed.

DWELL TIME (S): Select the dwell time (in second) for the preset position from 1 to 99.

FOCUS MODE: Select focus mode for the preset position from MANUAL, ONE PUSH and AUTO.

WHITE BALANCE: Select the white balance for the preset position from Auto, Indoor and outdoor.

TITLE: Enter title name for the preset position. Tilt the joystick up and down to scroll through the characters, then tilt left or right to move to the previous/next position. When finished, move the last digit and tilt the joystick right to return to previous screen.

DEFAULT: Select ON to set the preset position to default value.

FREEZE PICTURE: Image will stop at the previous position until the next position is reached.

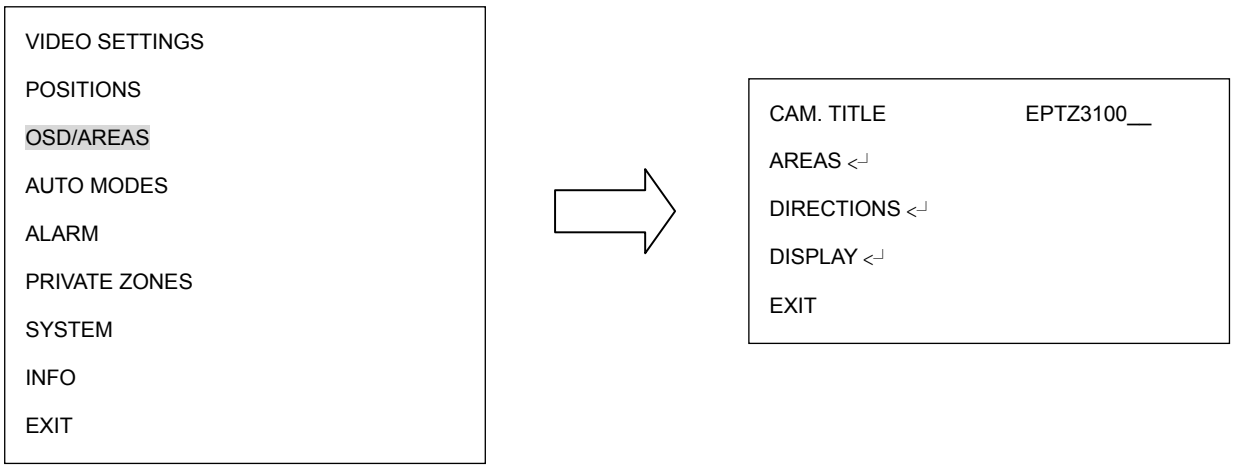
ON: freeze picture

OFF: disable freeze picture function.

EXIT: Select Exit to save settings and exit from current page.

4.4. OSD/AREAS

In main menu, turn joystick Up or Down to select OSD/AREAS. Turn joystick Left or Right to enter OSD/AREAS sub-menu (see diagram 4.8)



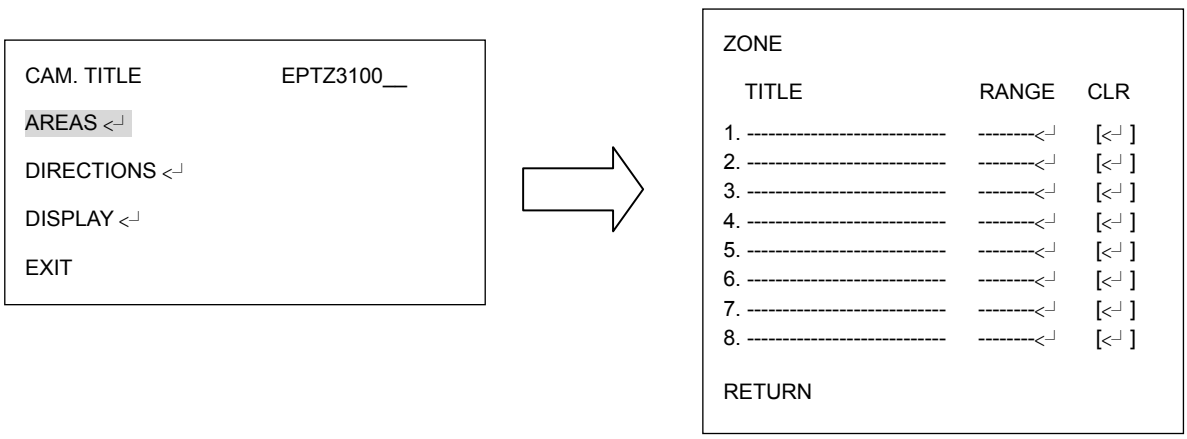
(diagram 4.8)

4.4.1. CAM. TITLE

Enter the title name for the camera, up to a maximum of 10 characters. Tilt the joystick up and down to scroll through the characters, then tilt left or right to move to the previous/next position. When finished, move the last digit and tilt the joystick right to return to previous screen.

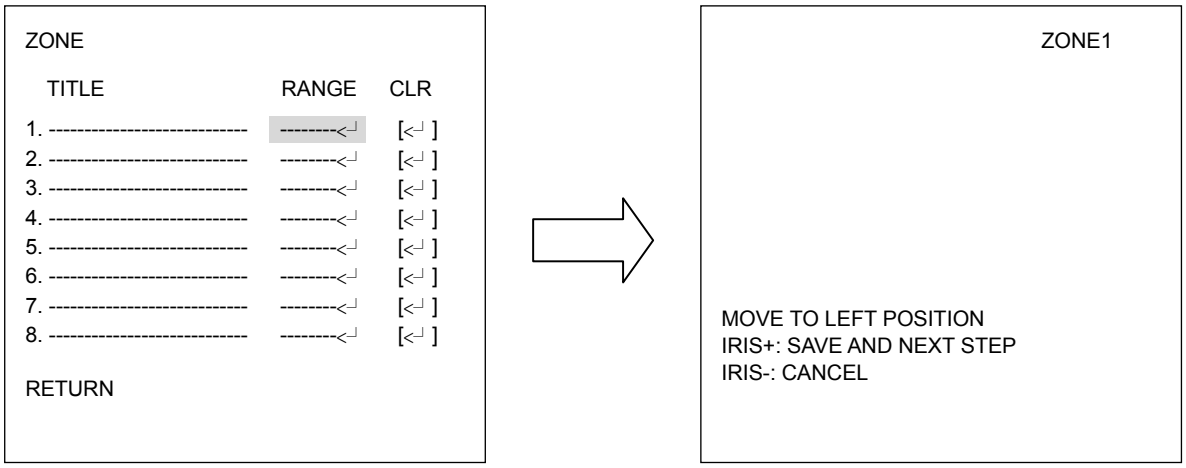
4.4.2. AREAS

Press Enter key of keyboard or turn joystick Left/Right to enter AREAS sub-menu.



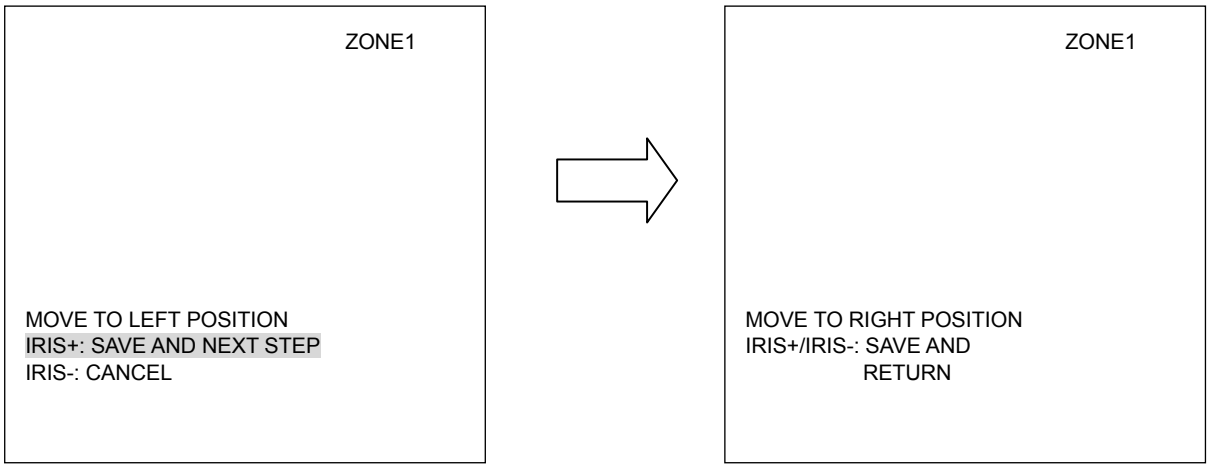
(diagram 4.9)

In zone menu, you can set a zone and name it, when the speed dome turns to the zone you set, it will display zone name on the screen (only if “OSD/AREAS->Display -> Zone” is set as “YES”). Tilt the joystick up and down to scroll through the characters, then tilt left or right to move to the previous/next position. When finished, tilt the joystick right to go to "Range" section, and press Enter key to enter Range sub-menu. Use the joystick to move speed dome to its left position. Press IRIS+ key to save left position setting and go to next step or press IRIS- to cancel.



(diagram 4.10)

Use the joystick to move speed dome to its right position. Press IRIS+ or IRIS- key to save and return.

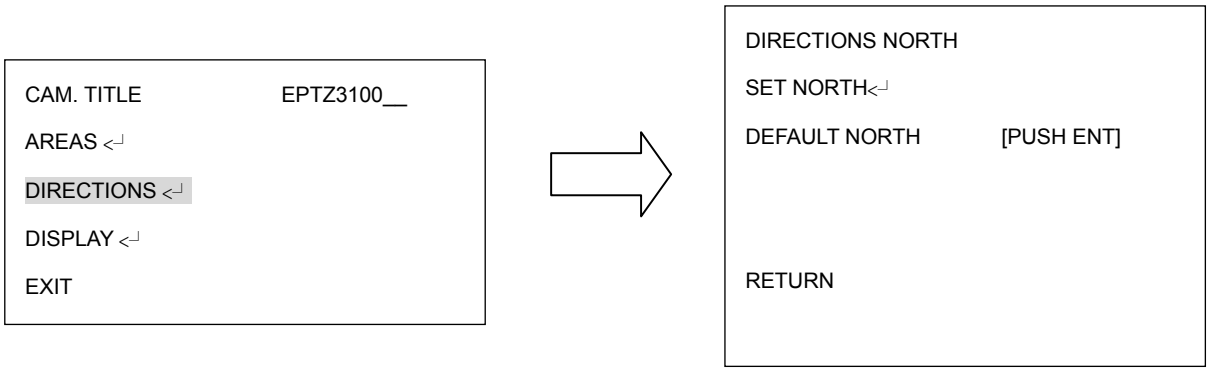


(diagram 4.11)

Tilt the joystick right or left to highlight the current zone or tilt up/down to select a different zone. If you wish to clear the zone you have set, go to “CLR” and press Enter key.

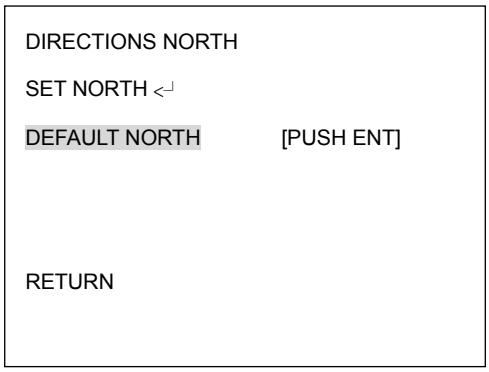
4.4.3. DIRECTIONS

Press Enter key of keyboard or turn joystick Left/Right to enter DIRECTIONS sub-menu (see diagram 4.12)



(diagram 4.12)

1. Press Enter key of keyboard or turn joystick Left/Right to enter Set North position menu.
2. Move the joystick to North position.
3. Press IRIS+ key of keyboard to save and return.

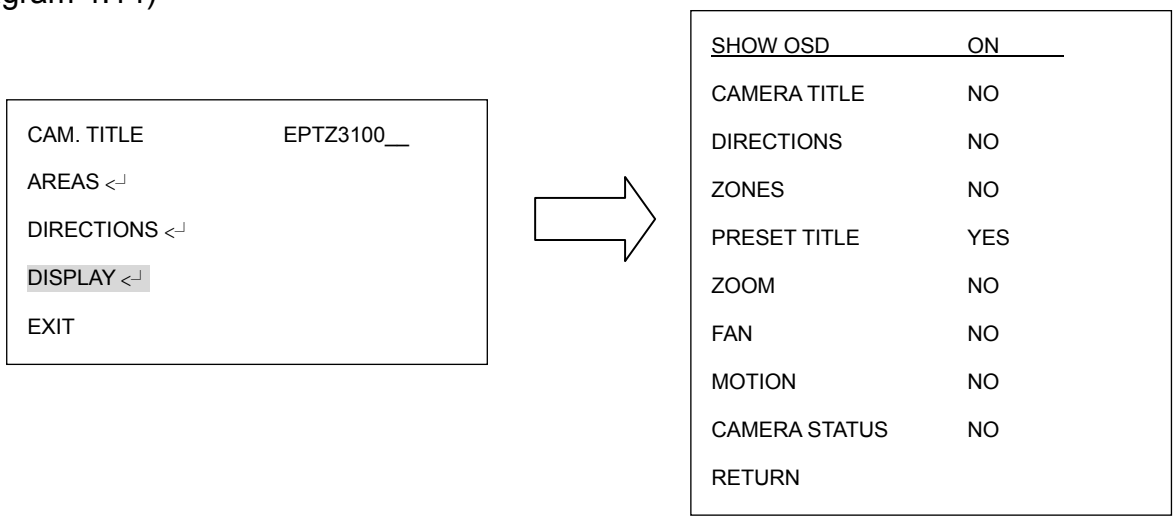


(diagram 4.13)

4. Go to “DEFAULT NORTH” and press Enter key to set the north position as default north position.
5. Go to Return and turn joystick Left/Right to return to previous menu.

4.4.4. DISPLAY

Press Enter key of keyboard or turn joystick Left/Right to enter DISPLAY sub-menu (see diagram 4.14)



(diagram 4.14)

2. SHOW OSD:

ON: show OSD of Camera Title, Directions, Zones, Preset Title, Motion, Zoom, Fan and Camera Status.

OFF: do not show OSD.

2 SEC: show OSD for 2 seconds.

5 SEC: show OSD for 5 seconds.

10 SEC: show OSD for 10 seconds.

2. CAMERA TITLE

YES: show camera title

NO: do not show camera title

3. DIRECTIONS

YES: show directions

NO: do not show directions

4. ZONES

YES: show zones

NO: do not show zones

5. PRESET TITLE

YES: show preset title

NO: do not show preset title

6. ZOOM

YES: show zoom multiple when zoom in or zoom out.

NO: do not show zoom multiple.

7. FAN

YES: show fan indication when fan is enabled.

NO: do not show fan indication.

8. MOTION

YES: show motion message when a motion occurs.

NO: do not show motion message when a motion occurs.

9. CAMERA STATUS

YES: shows camera status

NO: do not show camera status

10. RETURN

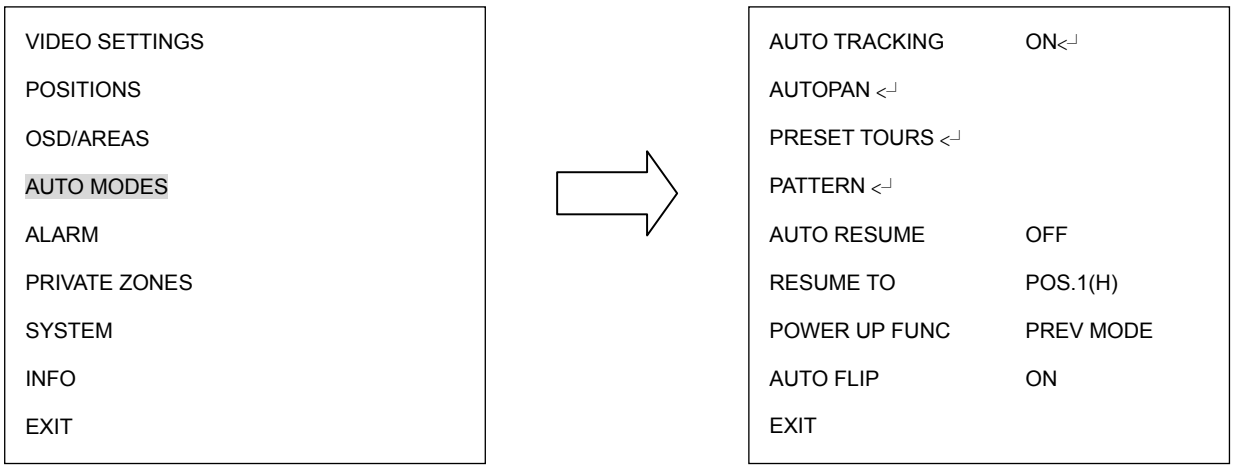
Turn joystick Left/Right to return to previous menu

4.4.5. EXIT

Select Exit to save settings and exit from current page.

4.5. AUTO MODES

In main menu, turn joystick Up/Down to select AUTO MODES. Turn joystick Left/Right to enter AUTO MODES sub-menu (See diagram 4.15)

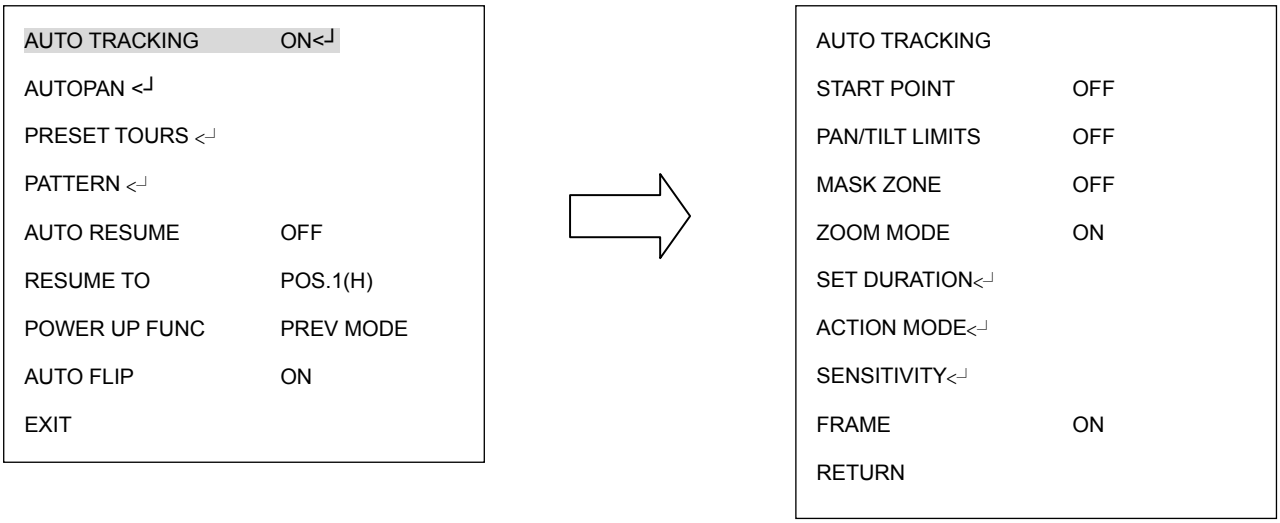


(diagram 4.15)

4.5.1. AUTO TRACKING (For Auto Tracking Model Only)

Turn joystick Left/Right to switch Auto Tracking on or off. When Auto tracking is on, press Enter key of keyboard to enter AUTO TRACKING sub-menu (see diagram 4.16).

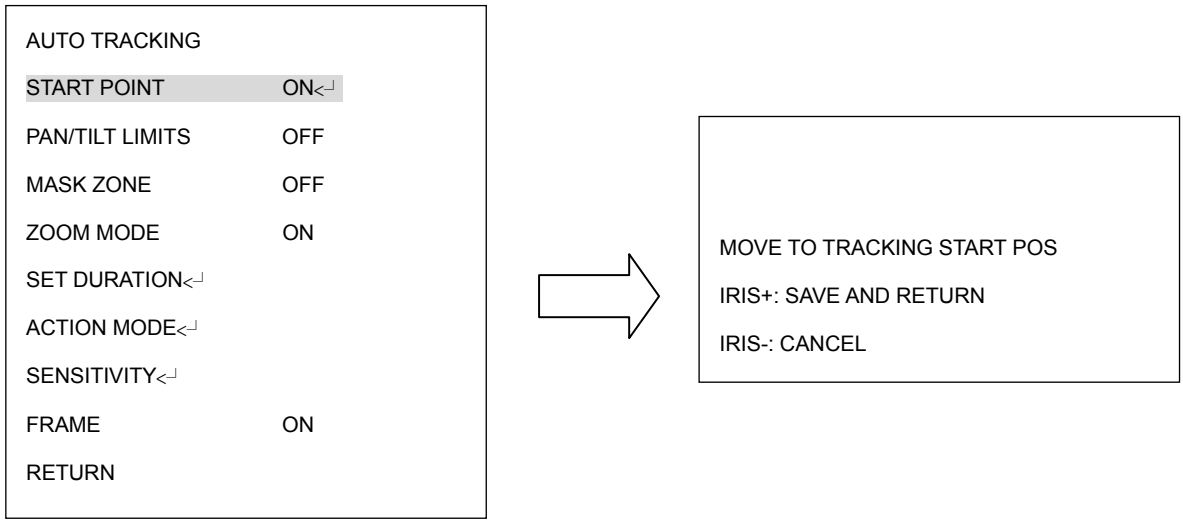
User can also use preset keys to operate auto tracking related functions. Please refer to ”5.2 Auto Tracking Mode”.



(diagram 4.16)

a. START POINT

ON: Turn joystick Left/Right to switch Start Point on or off. When Start Point is on, press Enter key to enter TRACKING START POS. menu. Turn the joystick to select the position where you wish to set Tracking Start position. Press IRIS+ key of keyboard to save setting and return to previous menu. (see diagram 4.17)



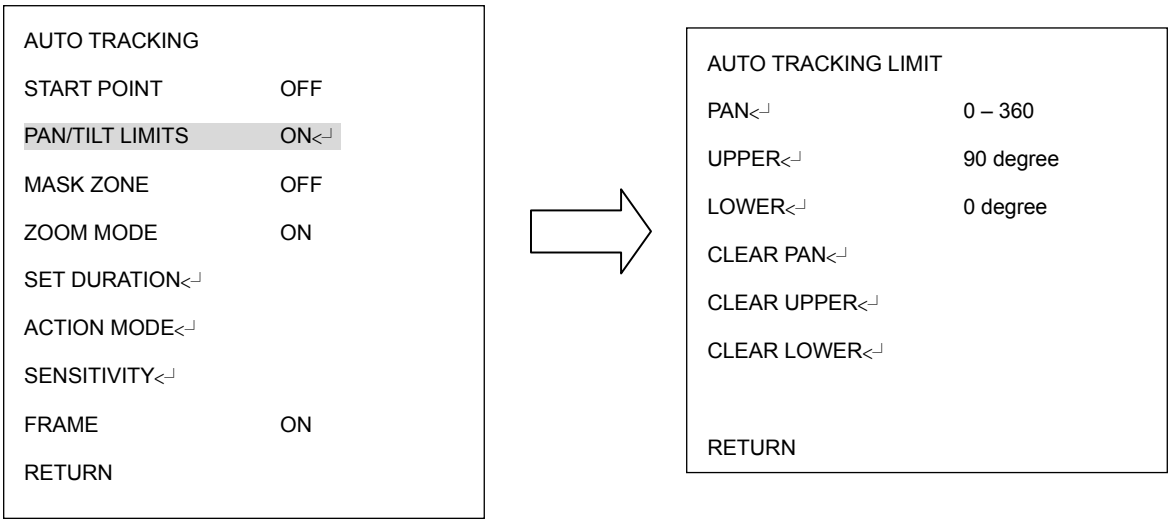
(diagram 4.17)

OFF: disable tracking start position function.

b. PAN/TILT LIMITS

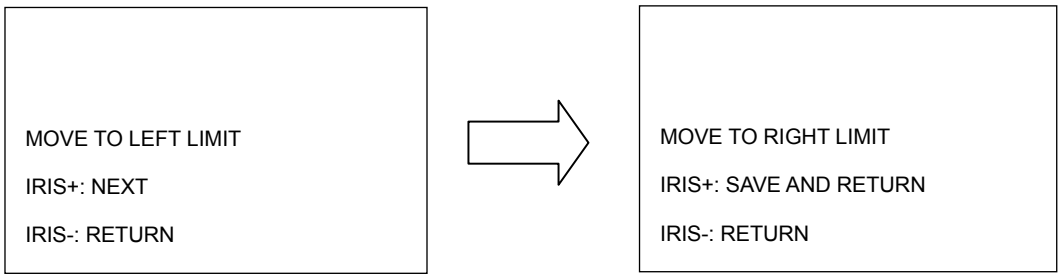
ON: Turn joystick Left/Right to switch Limits on or off. When Limits is on, press Enter

key to enter AUTO TRACKING LIMIT menu (see diagram 4.18). Turn the joystick Up/Down to select one of the four following functions and press Enter key to enter its setting menu.



(diagram 4.18)

PAN: In MOVE TO LEFT LIMIT window (see left of diagram 3.19), turn the joystick to select the position where you wish to set left limit. Press IRIS+ key of keyboard to enter MOVE TO RIGHT LIMIT window (see right of diagram 4.19). Turn the joystick to select the position where you wish to set right limit. Press IRIS+ key of keyboard to save setting and return to previous menu.

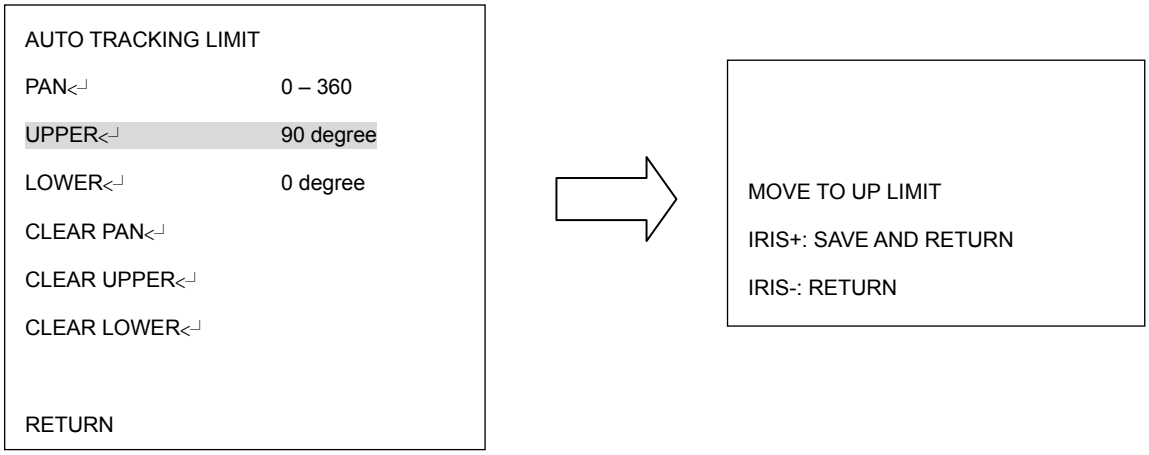


(diagram 4.19)

Note: If tracking start point is outside the limits, the screen will show “START POS IS OUTSIDE LIMIT. SET START POS” and user has to reset a start position between left and right limits.

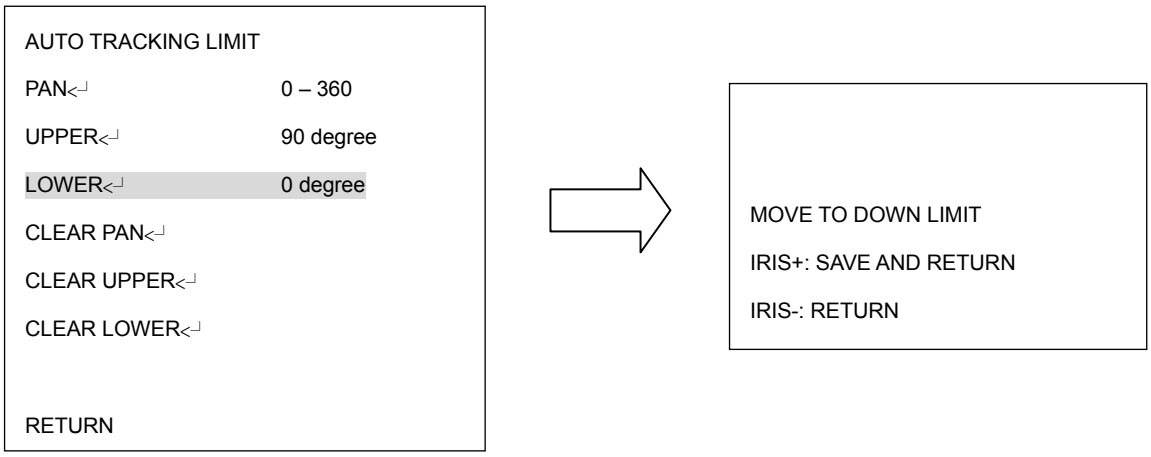
UPPER: In MOVE TO UP LIMIT window (see diagram 4.20), turn the joystick to select the position where you wish to set up limit. Press IRIS+ key of keyboard

to save setting and return to previous menu.



(diagram 4.20)

LOWER: In MOVE TO DOWN LIMIT window (see diagram 4.21), turn the joystick to select the position where you wish to set down limit. Press IRIS+ key of keyboard to save setting and return to previous menu.



(diagram 4.21)

Note: If tracking start point is outside the limits, the screen will show “START POS IS OUTSIDE LIMIT. SET START POS” and user has to reset a start position between left and right limits.

CLEAR PAN: select this option and press Enter key to clear pan setting.

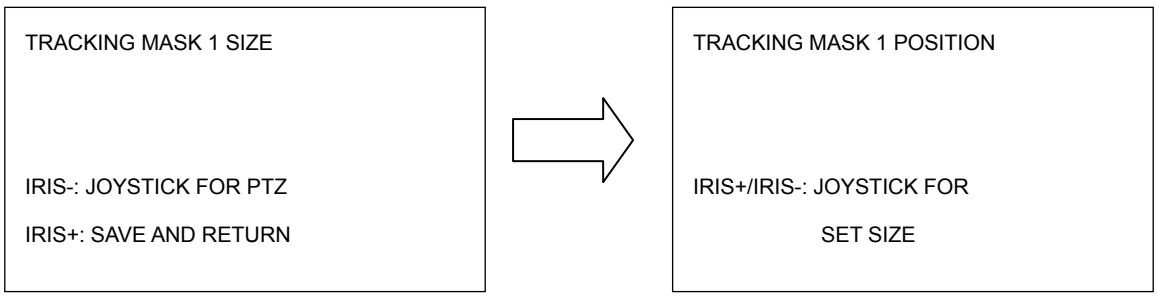
CLEAR UPPER: select this option and press Enter key to clear upper limit setting.

CLEAR LOWER: select this option and press Enter key to clear lower limit setting.

RETURN: select this option and press Enter key to save setting and return to previous menu.

c. MASK ZONE

ON: press Enter key to enter TRACKING MASK menu. Turn the joystick Up/Down to select a mask number. Turn the joystick Left/Right to select “SET” and press Enter key to enter its Tracking Mask Size window (see diagram 3.21). Turn the joystick to change mask to desired size: turn up/right to increase the length/width and turn down/left to decrease the length/width. Press IRIS- key of keyboard to enter Tracking Mask Position window (see right of diagram 4.22). Turn the joystick to select the position where you wish to set mask position. Press IRIS+/ IRIS- key of keyboard to save setting and return to previous tracking mask size window. Press IRIS+ key to save setting and return to previous menu.



(diagram 4.22)

When a mask setting is completed, you will see “GO” displayed behind the mask number. For example: MASK1 GO↵. User can turn the joystick Left/Right to change the status of preset mask, including Go, Clear and Set.

Examples:

MASK1 GO↵ : press Enter key to go to this preset mask position.

MASK1 CLEAR↵ : press Enter key to clear this preset mask.

MASK1 SET↵ : press Enter key to start setting this mask.

OFF: disable tracking mask function.

d. ZOOM MODE: While tracking an object, the system will zoom in to a suitable ratio for closer view.

e. SET DURATION

Press Enter key to enter SET DURATION menu.

DURATION(S): Set tracking duration time in seconds.

Lost Mode: User can set tracking mode when the object is lost on screen. Three available options are:

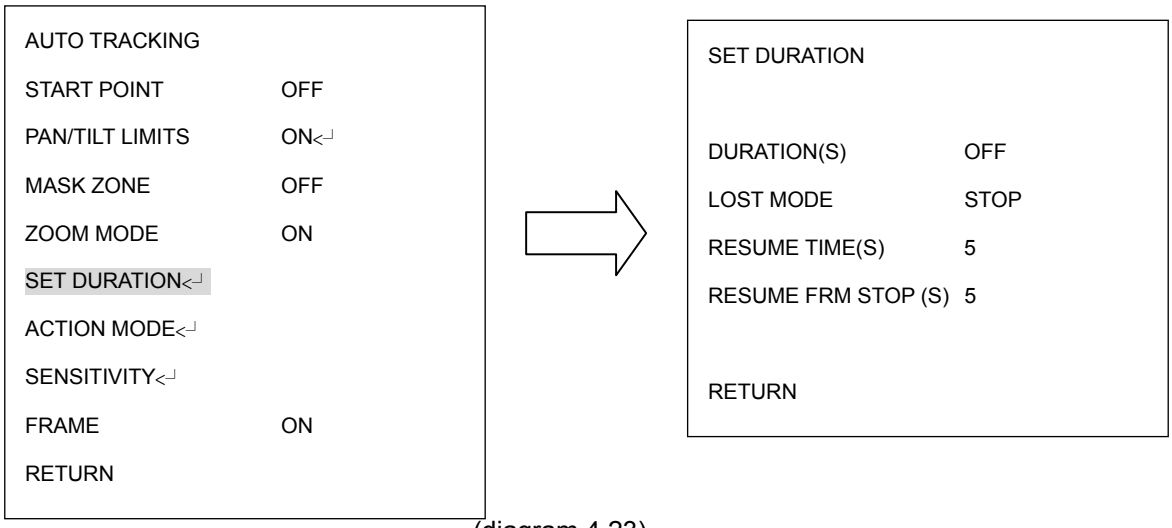
-Zoom: when tracking object is lost, the system will zoom out immediately and looking for a new tracking object

-Stop: when tracking object is lost, the system will stop tracking and zoom out.

-Keep: when tracking object is lost, the system will keep waiting another tracking object at the same position without changing zoom ratio

Resume Time: User can set desired duration for above three options.

RESUME FRM STOP (S): User may manually operate PTZ function of this camera when auto tracking function is on. When manual operation ceases, the system will resume to “auto tracking start point” after this time.



(diagram 4.23)

f. ACTIONS MODE

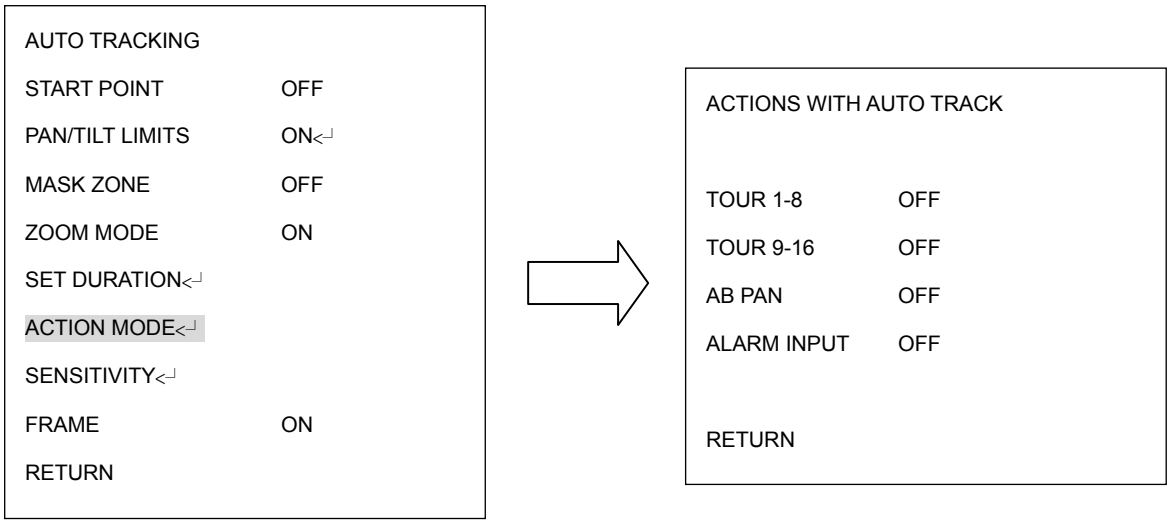
Press Enter key to enter ACTION MODE menu.

TOUR 1-8: Track an object while running tour 1-8.

TOUR 9-16: Track an object while running tour 9-16.

AB PAN: Track an object at poison A/B while running AB PAN

ALARM INPUT: If this option is ON, when the alarm is triggered, PTZ start tracking the position or tour depending on the reaction set in “Alarm Inputs”.



(diagram 4.24)

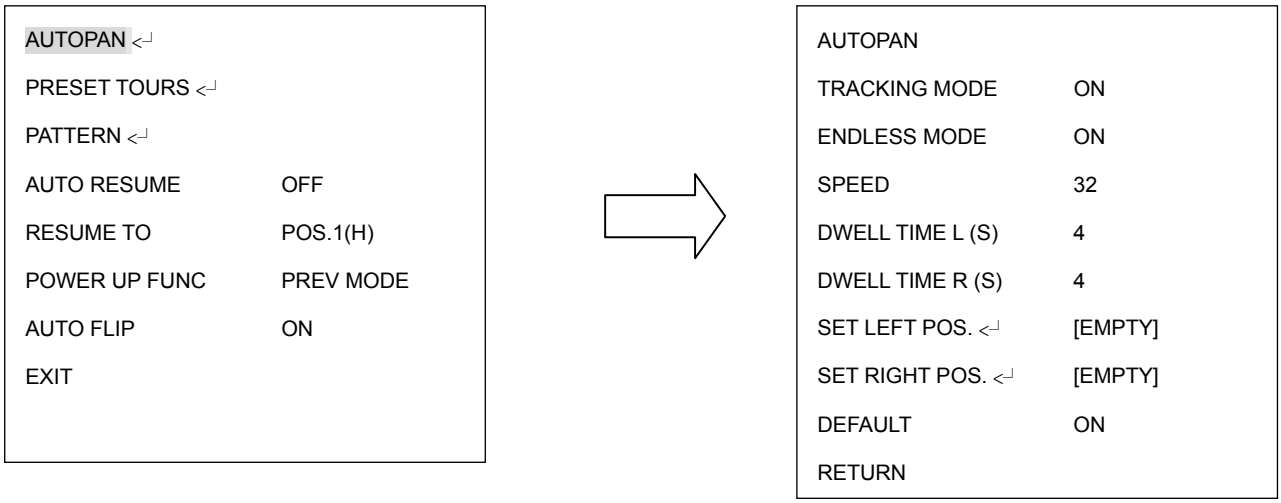
g. SENSITIVITY: User can set sensitivity level of auto-tracking. Available options are low, middle and high.

h. FRAME: User can set frame of tracking object visible by selecting this option ON.

RETURN: select this option and press Enter key to save setting and return to previous menu.

4.5.2. AUTOPAN

Press Enter key of keyboard or turn joystick Left/Right to enter AUTOPAN sub-menu (see diagram 4.25)



(diagram 4.25)

a. TRACKING MODE: (For Auto Tracking Models Only)

Auto tracking can be set on when Auto-Pan function is working. Turn joystick Left/Right to select tracking mode on/off. The system will go back to Auto-Pan mode when tracking is not working.

b. ENDLESS MODE

ON: enable endless mode. The speed dome will perform 360 degree endless auto-pan.

OFF: disable endless mode. The speed dome will perform auto-pan between position left and position right.

c. SPEED

Select speed from 1~255 and 255 is the highest speed.

d. DWELL TIME L (S)

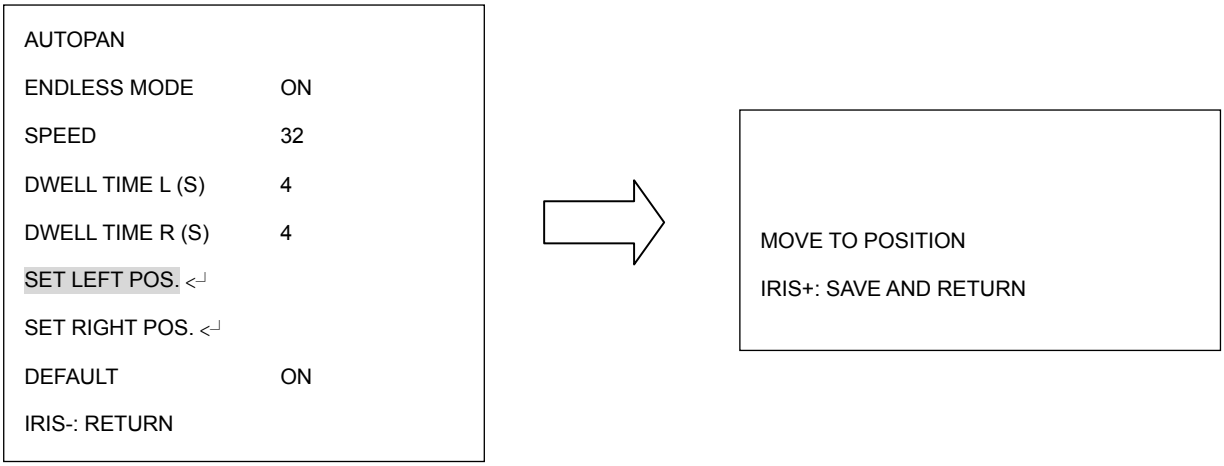
Select dwell time of the left position from 1~99 seconds.

e. DWELL TIME R (S)

Select dwell time of the right position from 1~99 seconds

f. SET LEFT POS.

Press Enter key or turn the joystick Left/Right to enter SET LEFT POS. menu. Turn the joystick to the position where you wish to set Left position. Press IRIS+ key of keyboard to save setting and return to previous menu. (see diagram 4.26)

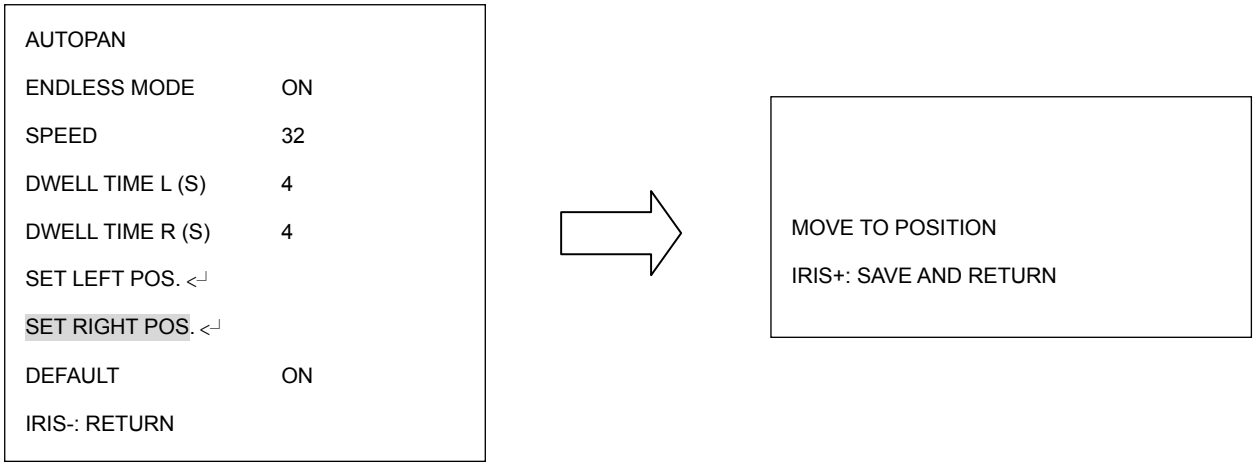


(diagram 4.26)

g. SET RIGHT POS.

Press Enter key or turn the joystick Left/Right to enter SET RIGHT POS. menu. Turn the joystick to the position where you wish to set RIGHT position. Press IRIS+ key of keyboard to save setting and return to previous menu. (see diagram 3.27)

Note: When Left/Right Position are set, the speed dome will patrol between each position.



(diagram 4.27)

h. DEFAULT

ON: all settings in AUTOPAN menu will be returned to default values.

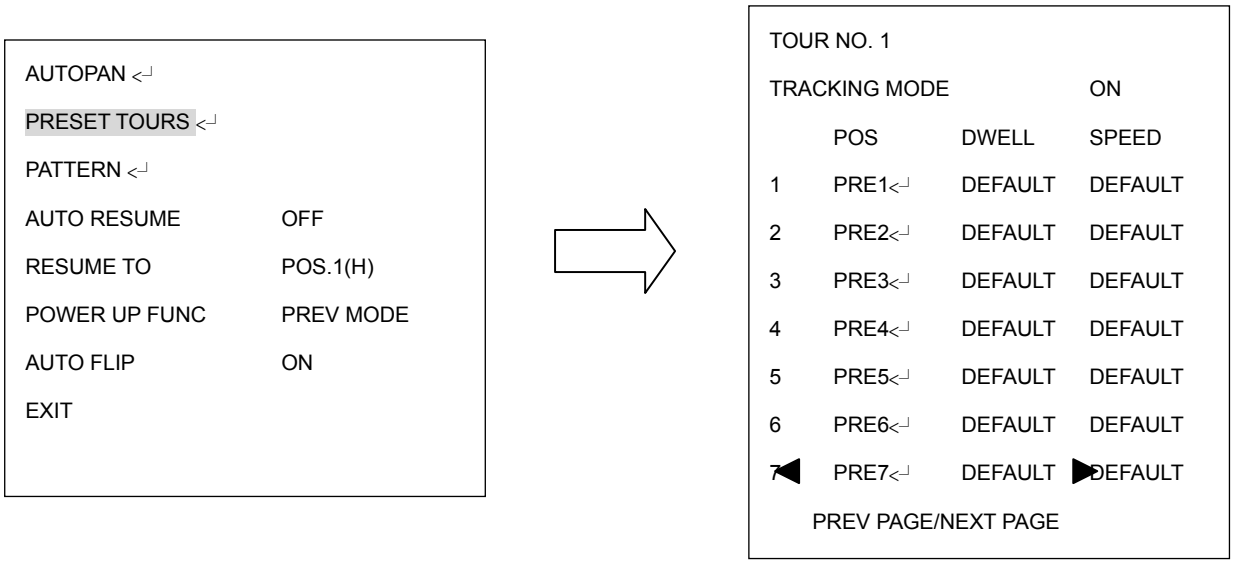
OFF: the setting in AUTOPAN menu is not default value.

i. RETURN

Turn joystick Left/Right to return to previous menu

4.5.3. PRESET TOURS

Press Enter key or turn the joystick Left/Right to enter PRESET TOURS sub-menu (see diagram 4.28)



(diagram 4.28)

a. TRACKING MODE (For Auto Tracking Models Only): Auto tracking can be set on when tour function is working. Turn joystick Left/Right to select tracking mode on/off. The system will go back to tour mode when tracking is not working.

b. Tour NO.: Turn the joystick Left/Right to select tour number first

c. PRE: Turn the joystick Left/Right to select preset position. Press Enter key of keyboard to go next setting. Max. 16 positions can be set for a tour.

d. DWELL: Turn the joystick Up/Down to set dwell time of the tour from 1~99 sec or default.

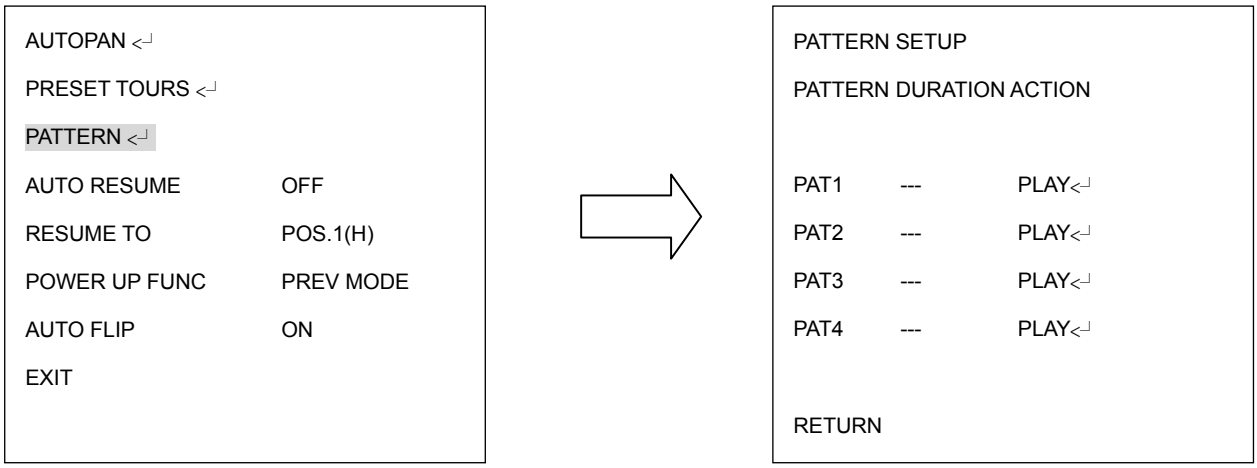
e. SPEED: Turn the joystick Right after setting dwell time. Turn the joystick Up or Down to select tour speed from 1 ~255 or default. Press Enter key when you finish Tour setting of preset position.

f. PREV PAGE/NEXT PAGE: Turn the joystick Left to go previous page or turn joystick Right to go next page.

g. RETURN: Turn joystick Left/Right to return to previous menu.

4.5.4. PATTERN

Press Enter key of keyboard to enter PATTERN sub-menu (see diagram 4.29)

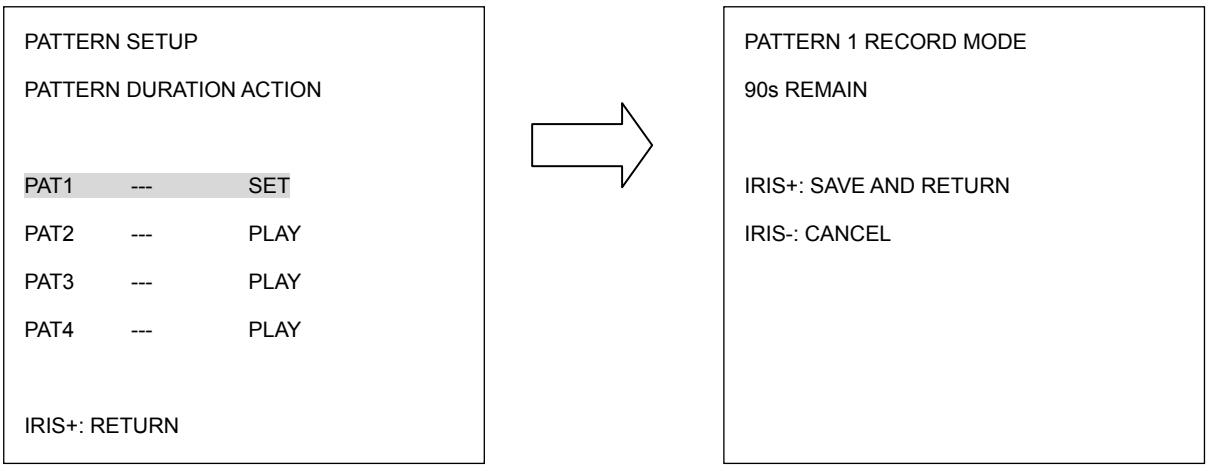


(diagram 4.29)

a. Turn the joystick Up or Down to select pattern number.

b. Turn the joystick Left or Right to select action mode, either **PLAY, SET** or **CLEAR**.

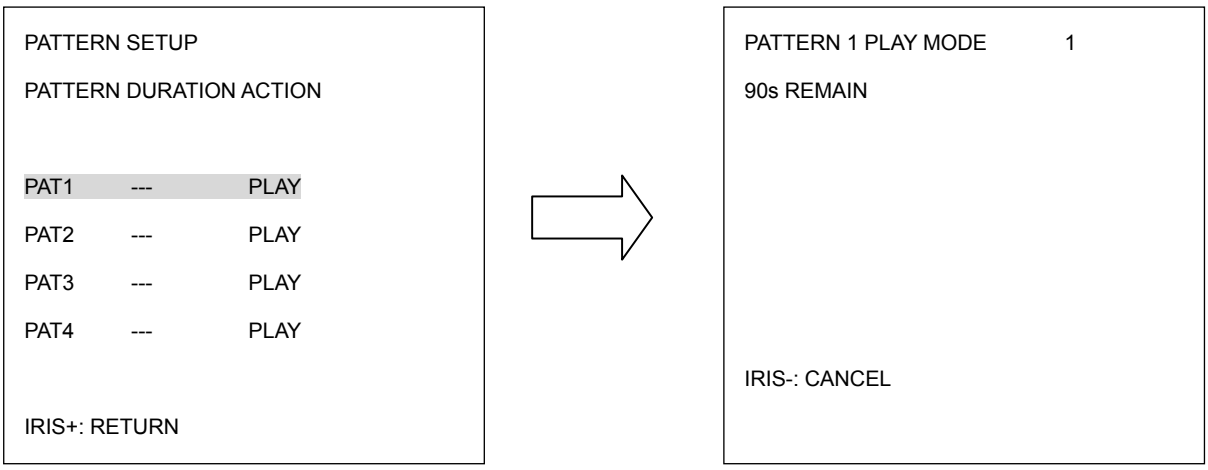
c. Select **SET** and press Enter key of keyboard.



(diagram 4.30)

d. Turn the joystick to record the tour you wish to set. Press IRIS+ when you finish setting pattern tour. Press IRIS- if you wish to cancel this action. At duration column of PATTERN SETUP menu, you will see the duration time of pattern you set.

e. When you return to PATTERN SETUP menu, turn the joystick Left/Right to **PLAY**. Press Enter key of keyboard. The camera starts to run the pattern tour you set. The camera keeps playing the pattern until you press IRIS- to cancel playing and it will return to PATTERN SETUP menu.



(diagram 4.31)

f. RETURN: Turn joystick Left/Right to return to previous menu.

4.5.5. AUTO RESUME

Return to previous mode, if no action for a period.

Turn the joystick Left/Right to set AUTO RESUME. Auto Resume is selectable from OFF, After 30 sec, After 1 min, after 5 min, After 10 min, After 30 min and After 60 min. After this period of time, speed dome will resume to the mode you set in “RESUME TO”. By selecting OFF, this function will be disabled.

4.5.6. RESUME TO

Turn the joystick Left/Right to select the mode to resume to. It is selectable from PREV MODE, POS.1 (H), TOUR1, PAT.1 and AUTOPAN.

4.5.7. POWER UP FUNC

Turn the joystick Left or Right to select the mode to return to when power failure occurs. It is selectable from PREV MODE, POS.1 (H), TOUR1, PAT.1, AUTOPAN and OFF

4.5.8. AUTO FLIP

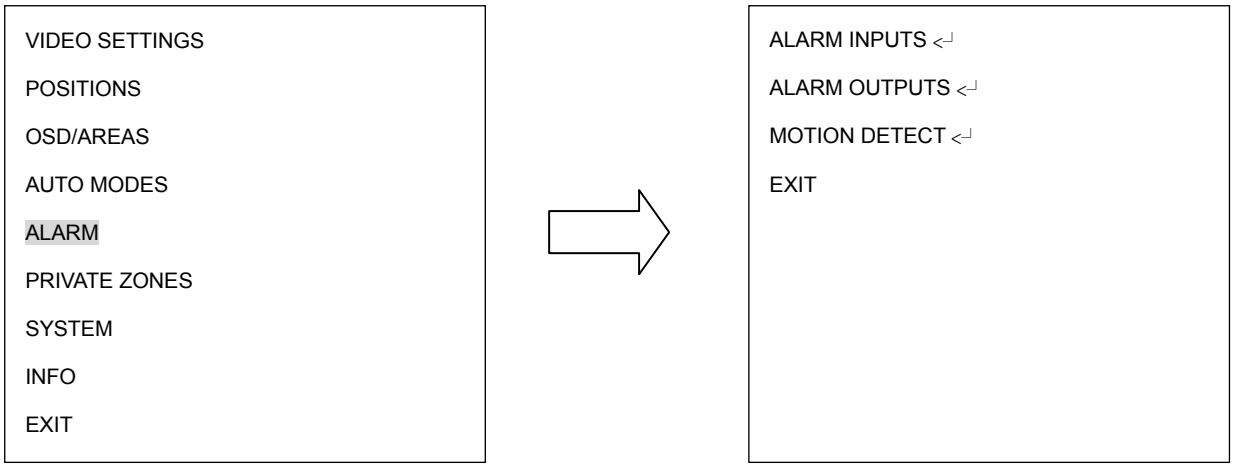
Select ON to enable Auto Flip function or select OFF to disable Auto Flip.

4.5.9. EXIT

Exit from the current menu.

4.6. ALARM

In main menu, turn joystick Up or Down to select ALARM. Turn joystick Left or Right to enter ALARM sub-menu (see diagram 4.32)



(diagram 4.32)

4.6.1. ALARM INPUTS

Press Enter key of keyboard to enter ALARM INPUTS sub-menu. (see diagram 4.33)

a. Go to INPUT NO. selection and turn the joystick Left/Right to select alarm input number from 1 ~4.

b. Type: Select Normal Close (NC), Normal Open (NO), NIGHT NC, NIGHT NO, or OFF for alarm type.

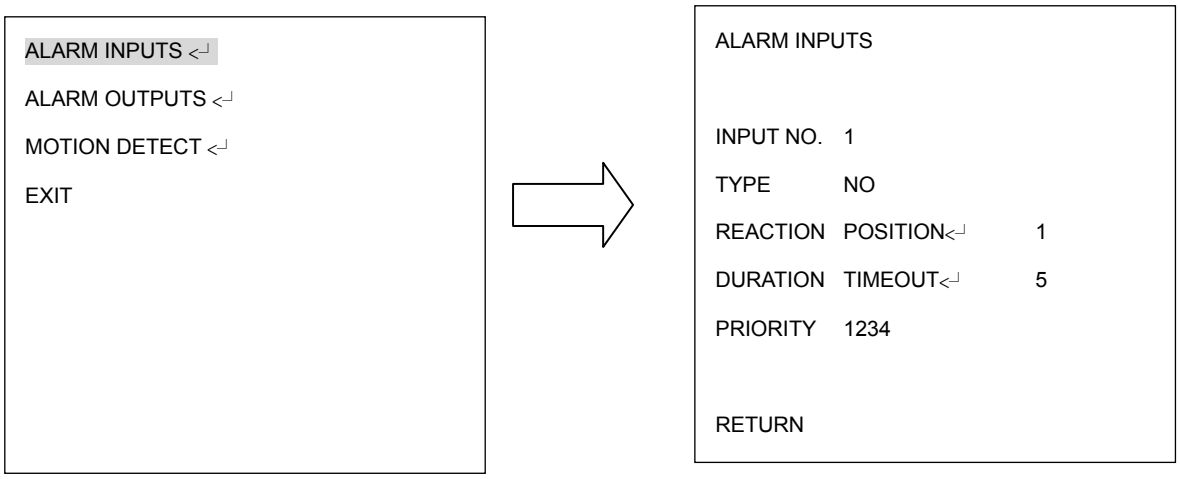
NC: Enable a normal close alarm input.

NO: Enable a normal open alarm input.

NIGHT NC: Set camera at night mode with normal close alarm input. When there is event triggered, the camera will be changed to day mode.

NIGHT NO: Set camera at night mode with normal open alarm input. When there is event triggered, the camera will be changed to day mode.

OFF: Disable alarm input.



(diagram 4.33)

c. REACTION: The action will be taken when alarm is triggered.

OFF: No reaction will be taken when alarm is triggered.

POSITION: When the alarm is triggered, speed dome will go to the preset position. Turn the joystick Left or Right to select on Position and press Enter key to select position number. Turn joystick Left/Right to make selection. It is selectable from 1~192. Press Enter key again to confirm selection.

PATTERN: When the alarm is triggered, speed dome will run the pattern. Turn the joystick Left/Right to select on Pattern and press Enter key to select pattern number. Turn joystick Left/Right to make selection. It is selectable from1~4. Press Enter key again to confirm selection.

TOUR: When the alarm is triggered, speed dome will run the tour. Turn the joystick Left or Right to select on Tour and press Enter key to select tour number. Turn joystick Left or Right to make selection. It is selectable from1~16. Press Enter key again to confirm selection.

d. DURATION: Duration of alarm input.

TIMEOUT: Turn the joystick Left or Right to select on TIMEOUT and press Enter key

to select time-out. Time-out is selectable from 1~99. Press Enter key again to confirm selection.

LATCHED: Turn the joystick Left or Right to select on LATCHED. The alarm output will not stop until there is any operation on keyboard.

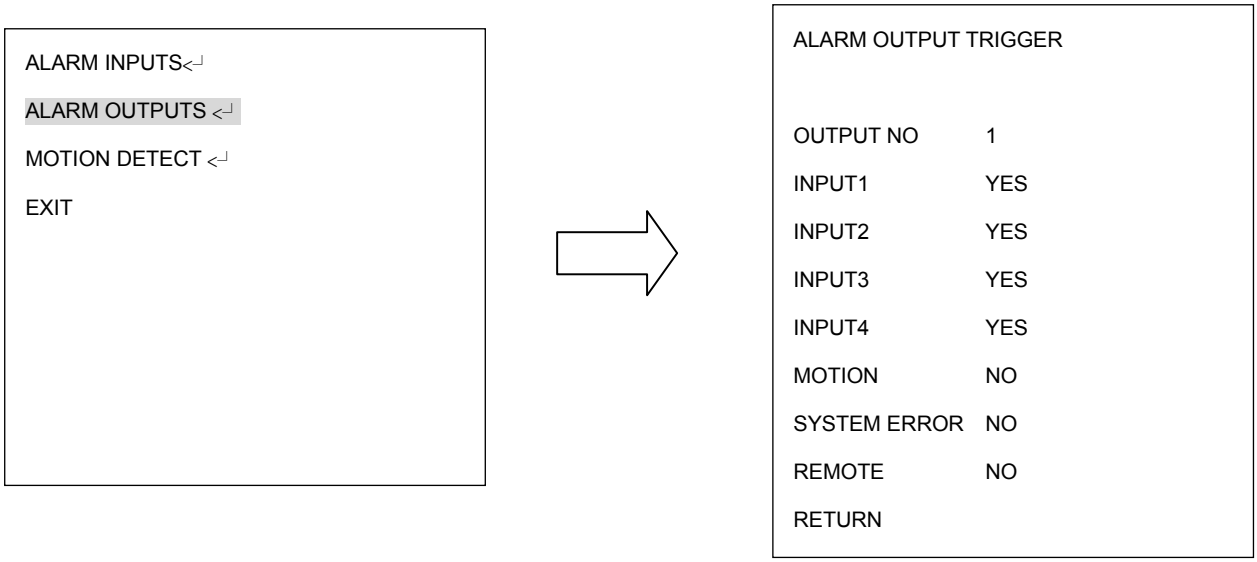
TRANSPARENT: Turn the joystick Left or Right to select on TRANSPARENT. The alarm output will not stop until the alarm is stopped.

e. PRIORITY: Turn the joystick Left or Right to select alarm input priority, it is selectable from 1234/2341/3412/4123.

f. RETURN: Turn joystick Left/Right to return to previous menu.

4.6.2. ALARM OUTPUTS

Press Enter key of keyboard to enter ALARM OUTPUTS sub-menu. (see diagram 4.34)



(diagram 4.34)

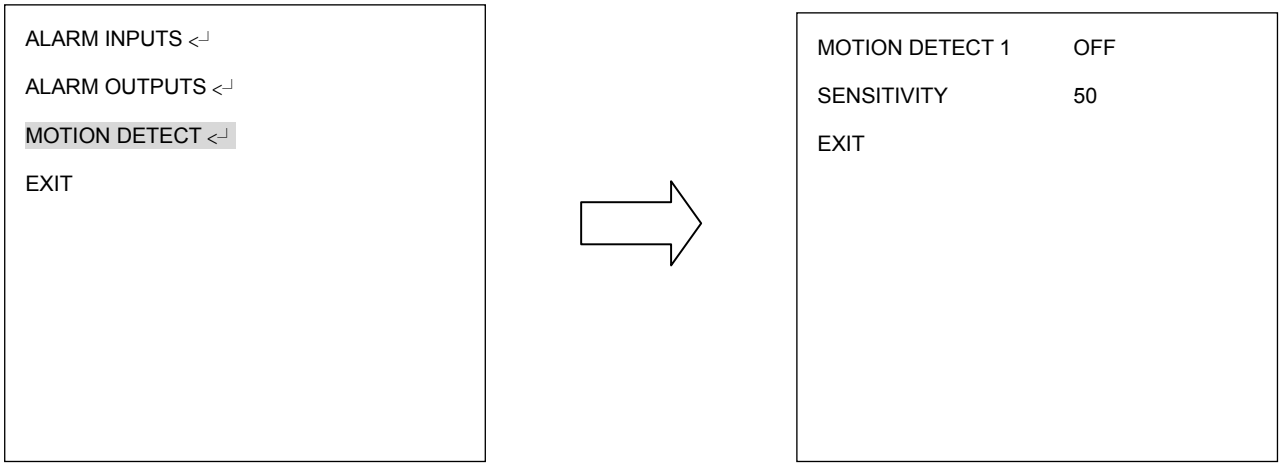
a. OUTPUT NUM: Select Output number from 1~2.
b. INPUT1: Select YES to enable Alarm input 1 for the alarm output selected. Select NO to disable Alarm input 1.
c. INPUT2: Select YES to enable Alarm input 2 for the alarm output selected. Select NO to disable Alarm input 2.
d. INPUT3: Select YES to enable Alarm input 3 for the alarm output selected. Select NO to disable Alarm input 3.
e. INPUT4: Select YES to enable Alarm input 4 for the alarm output selected. Select NO to disable Alarm input 4.
f. MOTION: Select YES to have alarm output triggered when a motion event is detected. Select NO to disable this function.
g. SYSTEM ERROR: Select YES to have alarm output triggered when system error occurs. Select NO to disable this function.
h. REMOTE: Select YES to have alarm output triggered when RS485 failure occurs.

Select NO to disable this function.

i. RETURN: RETURN to the previous menu.

4.6.3. MOTION DETECT

Press Enter key of keyboard to enter MOTION DETECT sub-menu. (see diagram 4.35)



(diagram 4.35)

a. Turn the joystick Left or Right to select ON for motion detection. A window as below pops up.

(diagram 4.36)

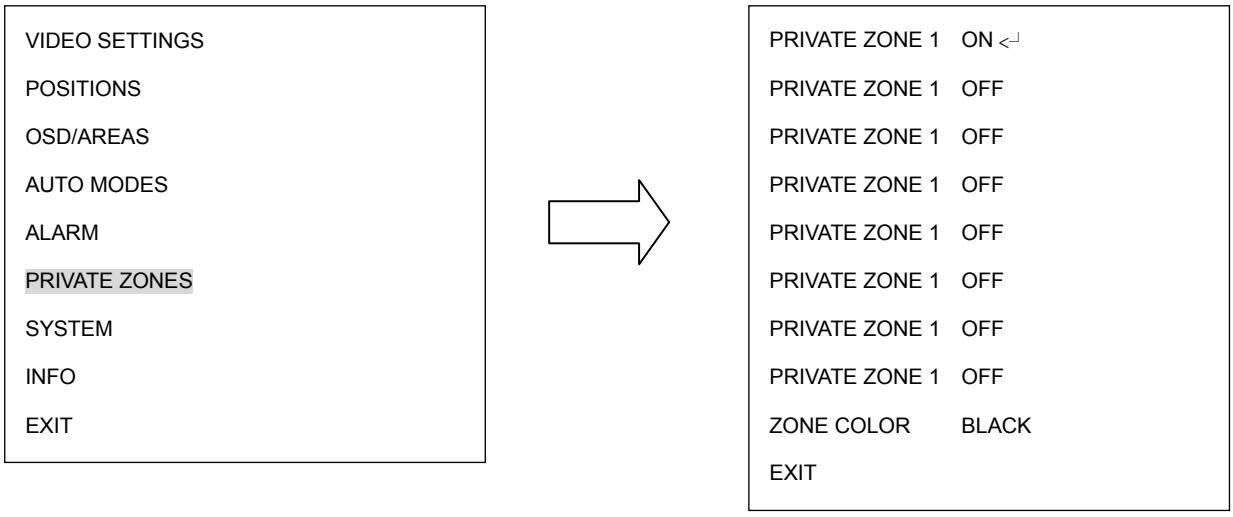
b. SENSITIVITY: select motion detection sensitivity level from 1~100.

4.6.4. EXIT

Exit from the current menu.

4.7. PRIVATE ZONES

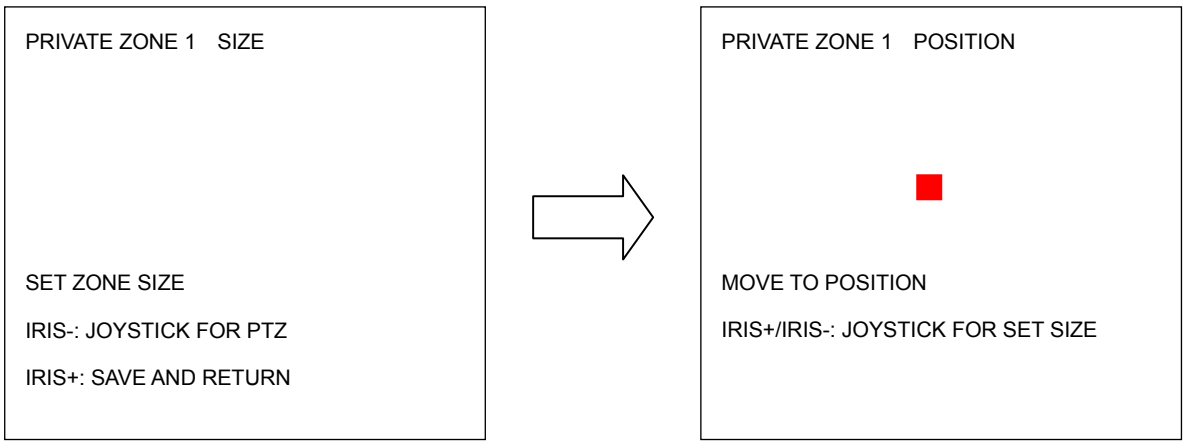
In main menu, turn joystick Up/Down to select PRIVATE ZONES masking. Turn joystick Left/Right to enter PRIVATE ZONE sub-menu (see diagram 4.37)



(diagram 4.37)

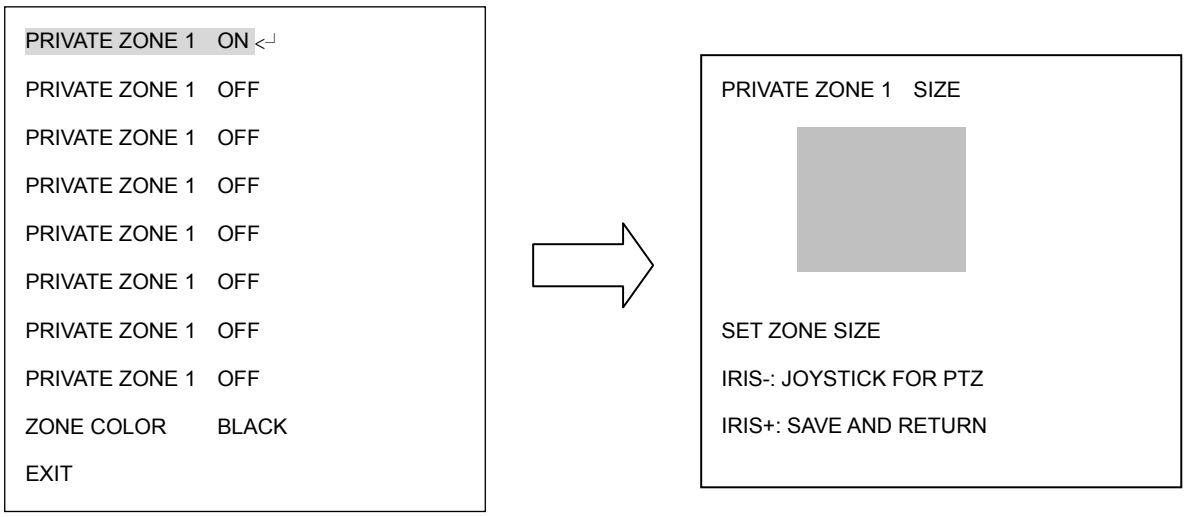
a. ON: Turn joystick Left/Right to select ON/OFF. For private zone ON, press Enter key to enter private zone position.

b. Turn the joystick and move to position of private zone. Press IRIS+ or IRIS- key to set private zone size.



(diagram 4.38)

c. Select the area to be covered first. Turn joystick Left/Right to adjust width of the private zone area. Turn joystick Up or Down to adjust height of the private zone area. Press IRIS- key to set private zone position. Press IRIS+ to save and return to previous menu.



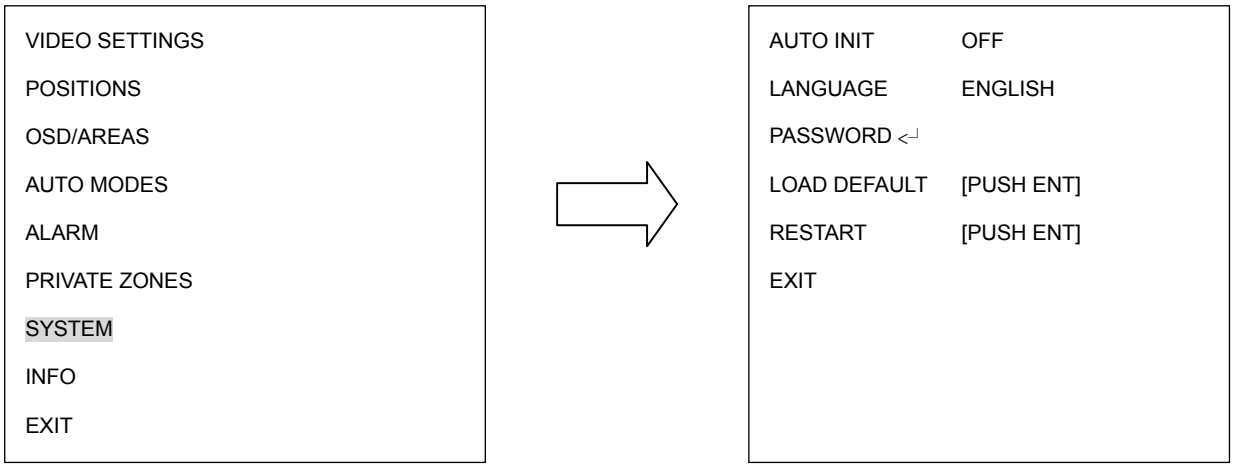
(diagram 4.39)

d. Zone color: select private zone area color.

e. Exit: exit from current menu.

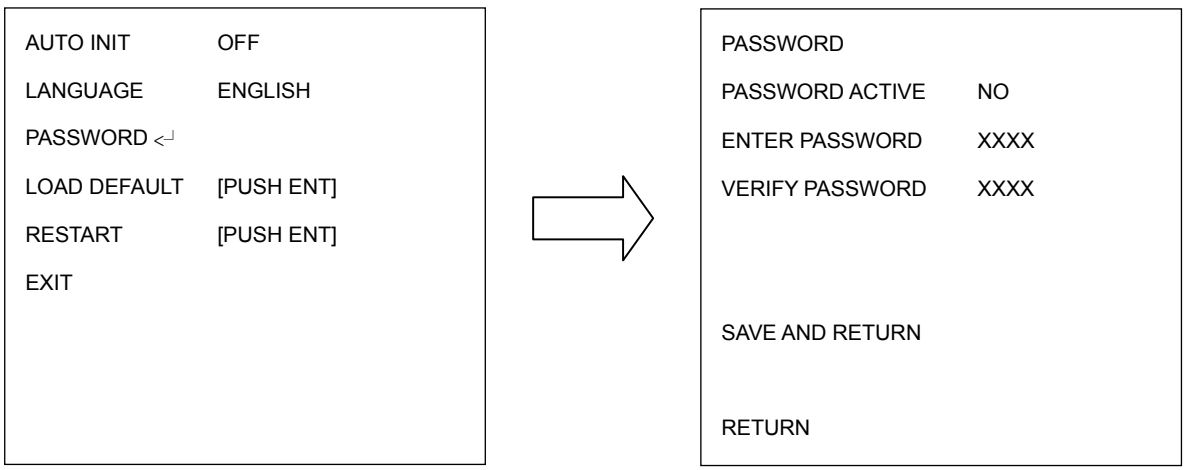
4.8. SYSTEM

In main menu, turn joystick Up/Down to select SYSTEM. Turn joystick Left/Right to enter SYSTEM sub-menu (see diagram 4.40)



(diagram 4.40)

a. AUTO INIT: Select auto initiation time from OFF, DAILY, WEEKLY. Speed dome will automatically initiate and return to the previous position by maintaining all the settings you have done.
b. LANGUAGE: Select language. The current version only supports English version.
c. PASSWORD: Press Enter key or turn joystick Left/Right to enter password sub-menu.



(diagram 4.41)

PASSWORD ACTIVE: Select YES to activate password mode. Select NO to disable password mode.

ENTER PASSWORD: Enter the password

VERIFY PASSWORD: Enter the password again to confirm your input.

Press IRIS+ key to save and return to previous menu. Press IRIS- key to cancel.

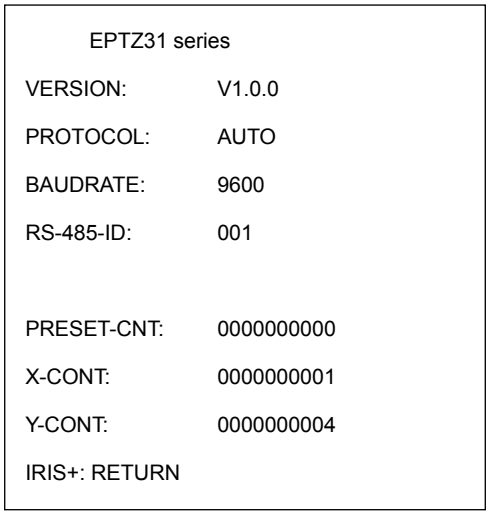
SAVE AND RETURN: Turn joystick Left/Right to save the changes and return to previous menu.

RETURN: Turn joystick Left/Right to return to previous menu without saving changes.

d. LOAD DEFAULT: Press Enter key to load default values, all values will return to factory default value.
e. Restart: Press Enter key to restart the speed dome.
f. EXIT: Exit from current menu.

4.9. INFO

In main menu, turn joystick Up or Down to select INFO. Turn joystick Left or Right to enter INFO sub-menu (see diagram 3.33)



(diagram 4.42)

a. VERSION: shows firmware version of this speed dome
b. PROTOCOL: shows protocol of this speed dome

c. BAUDRATE: shows baud rate of this speed dome

d. RS-485-ID: shows RS-485 ID of this speed dome

e. PRESET-CNT: Preset counter. This counter counts the preset movement, and 1 is counted when the speed dome runs to preset position.

f. X-CONT: X-axis counter. This counter counts the x axis movement, and 1 is counted when the speed dome pans 360°.

g. Y-CONT: Y-axis counter. This counter counts the y axis movement, and 1 is counted when the speed dome tilts 180°.

h. Press IRIS+ key to return to previous menu.

4.10. EXIT

Exit from the current menu.

5. EPTZ FUNCTION SETUP AND OPERATION

5.1. Manual Control Mode

- **Manual control:** Shift Joystick Up/Down/Left/Right, and turn it Clockwise/Counterclockwise to control speed dome.

  Use the control keys which are Zoom, Focus and IRIS function keys on the keyboard to Zoom In/Out, focus N (near)/F (Far), or IRIS +/-.

  Note: Zoom In/Out control keys will be disabled when entering to OSD menu mode.

- **HOME Mode:** The camera view will go back to the home position when there is no keyboard operation in a specific time. The home position and the specific time can be set by pressing Set + Home.

  If you set the time to 0 minute, then the camera will go back to home if there is no keyboard operation in 5 seconds. This is the minimum no action time for HOME mode.

  Note: If "HOME" function is enabled, dome will go to home immediately after powering on.

5.2. Auto Tracking Mode (For Auto Tracking Models Only)

- User can control “auto tracking” on or off by pressing “81” and Enter key.
- User can set “manual select object” on by pressing “82” and Enter key.
- Camera can directly go to tracking start point by pressing “83” and Enter key.

5.3. Auto Pan Mode

- **Two point auto pan**: Press A.Pan to enter the auto pan mode, and then the system will ask you to enter the auto pan speed (1~239). Press Enter to start auto pan.

  In order to set the two points, press Set + A.Pan, and then enter the dwell time (1~127 seconds) of each point. The speed dome begins to pan from point A to point

B clockwise.

- **360° auto pan:** Press Shift + A.Pan to enter the 360° auto pan. System will ask you to enter 360° auto pan speed (1~239). The camera will turn 360° automatically, but not tilt.

5.4. Position Setting

- **Focus on a preset position:** Press the number key, and then press Position to focus on the number of preset position; or you can press Position, then enter the preset position number, and then press Enter to focus on the number of preset position.

- **Preset a position:** Shift the Joystick to the position you would like to preset, and then press Shift + Position. The system will ask you to enter the preset position number (1~192), and then press Enter to save the position. There are up to 192 positions can be preset.

  Three specific preset positions can be set as follows:

  92 => Set Left Limit Stop (A position)

  93 => Set Right Limit Stop (B position)

  95 => Enter Menu mode (Use keyboard control keys to control OSD items; Focus F. to go downward, Focus N. to go upward. IRIS + go to previous setting and IRIS – to exit).

  You can directly go to the following specific preset positions:

  33 => Rotation of 180 degree

  34 => Go to Home position (if Home Position is set by EVF Keyboard)

  90 => Run tour (one-way)

  91 => Run Pattern

94 => Initial

96 => Stop Scan

97 => Start running tour 1

98 => Frame scan (60 degree / step)

Default speed is 32. It can be changed by EVF Keyboard (Shift + A.Pan setting speed.

Dwell time: default is 2 sec; It can be changed by EVF Keyboard Set + A.Pan setting dwell time of A pos or B pos.

99 => Auto scan (360 degree)

Default speed is 32. It can be changed by EVF Keyboard (Shift + A.Pan setting speed).

We can even set camera's ICR Day/Night function with RS-485 command via keyboard. How to do this? Press Position + **88** to link to Day mode or Position + **89** to link to Night mode, "ICR AUTO" message will be shown on the right-bottom part of the screen. If OSD Day/Night ICR mode is "AUTO", it cannot be controlled by preset position setting.

- **Set the parameter of a preset position:** Press Set + Position to set the parameter of a preset position. You can set the going-to speed (1~239), dwell time (1~239 seconds), and the title of the position. Shift the joystick Right/Left to change bits, and shift the Joystick Up/Down to change the alphanumeric characteristic. The available alphanumeric characteristics are 0~9, A~Z, &, ?, !, :, ', ., ,, /, -, and a space.
- **Delete a preset position:** Press Clr + Position to delete a preset position. The system will ask you to enter the position number that you would like to delete, and then press Enter.

5.5. Tour Mode

In the tour mode, you can set a tour for viewing. There are 16 tours can be set, and 16 preset positions in a tour.

- **One-way tour Mode:** Press Tour to enter the tour mode. The system will ask you to enter the tour number you would like to run, and starts the tour after pressing Enter. To preset a tour before running is necessary.

  Preset a one-way tour: Press Set + Tour to preset a one-way tour. The system will ask you to enter preset position numbers (The positions need to be preset). After finish entering all positions, press Stop to quit, and then press Enter to save the tour.
- **To-and-fro tour mode:** Press Shift + Tour to run a to-and-fro tour. The system will ask you to enter the tour number you would like to run, and starts the tour after pressing Enter. To preset a tour before running it is necessary.

Note 1: The difference between the One-way tour mode and To-and-fro tour mode is that the return modes are different. For example: There is a tour with 3 preset positions 1, 2 and 3. The camera runs 1→2→3→1→2→3 in the One-way tour mode, and 1→2→3→2→1 in the To-and-fro tour mode.

Note 2: You could set a pattern tour. Press Set + Tour, and input 0, press Enter. Sway the joystick to record the entire tour. Press Stop to stop recording tour. To view this pattern tour, simply press Tour, and input tour number 0.

5.6. Alarm Link to a Position/Tour

The speed dome has 4 alarm inputs that can be set to link to a position or a tour when an alarm is triggered.

- **Set an alarm link:**

  Press **F1** to set an alarm link. Enter the alarm number, and then press **Enter**.

  Switch the Joystick up/down to select a position or a tour, enter a position or tour number, and then press **Enter** to confirm the alarm link setting.

  If you set the position number to 99, the dome will do a 360 degree auto scan or AB two point pan if limit is ON. If you set the position number to 98, the dome will do a frame scan.

- **Delete an alarm link:**

  Press **Clr** + **F1** to delete a link of alarm to position/tour.

  Note 1: After alarm output signal is terminated, the speed dome will resume action or return to its original position.

  Note 2: After powering on the speed dome, it will detect alarm status automatically.

5.7. Other Operations

The speed dome can work with a DVR that has PTZ control functions, and a matching protocol. The available control functions depend on different DVRs.

The speed dome can work with a keyboard that has PTZ control functions, and a matching protocol. The available control functions depend on different keyboards.

EverFocus Electronics Corp.

Head Office:

12F, No.79 Sec. 1 Shin-Tai Wu Road,
Hsi-Chih, Taipei, Taiwan
TEL: +886-2-26982334
FAX: +886-2-26982380
www.everfocus.com.tw

Europe Office:

Albert-Einstein-Strasse 1
D-46446 Emmerich, Germany
TEL: +49(0)-2822-9394-0
FAX: +49(0)-2822-9394-95
www.everfocus.de

USA L.A. Office:

1801 Highland Ave. Unit A
Duarte, CA 91010, U.S.A.
TEL: +1-626-844-8888
FAX: +1-626-844-8838
www.everfocus.com

China Office:

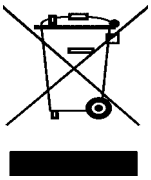
Room B-05D-1, KESHI PLAZA,
Shangdi Information Industry Base,
Haidian District, Beijing China 100085
TEL: +86-10-62973336/37/38/39
FAX: +86-10-62971423
www.everfocus.com.cn

USA N.Y. Office:

415 Oser Avenue Unit S
Hauppauge, NY 11788
TEL: +1-631-436-5070
FAX: +1-631-436-5027
www.everfocus.com

Japan Office:

1809 WBG MARIBU East 18F,
2-6 Nakase.Mihama-ku.
Chiba city 261-7118, Japan
TEL: +81-43-212-8188
FAX: +81-43-297-0081
www.everfocus.co.jp



Your EverFocus product is designed and manufactured with high quality materials and components which can be recycled and reused.
This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.
Please, dispose of this equipment at your local community waste collection/recycling centre.
In the European Union there are separate collection systems for used electrical and electronic product.
Please, help us to conserve the environment we live in!

Ihr EverFocus Produkt wurde entwickelt und hergestellt mit qualitativ hochwertigen Materialien und Komponenten, die recycelt und wieder verwendet werden können.
Dieses Symbol bedeutet, dass elektrische und elektronische Geräte am Ende ihrer Nutzungsdauer vom Hausmüll getrennt entsorgt werden sollen.
Bitte entsorgen Sie dieses Gerät bei Ihrer örtlichen kommunalen Sammelstelle oder im Recycling Centre.
Helfen Sie uns bitte, die Umwelt zu erhalten, in der wir leben.

EverFocus®

P/N: MW01G03300